Health Care Financing

Status Report

Research and Demonstrations in Health Care Financing
January 1987 Edition

Health Care Financing Administration

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The Office of Research and Demonstrations (ORD), Health Care Financing Administration (HCFA), directs nearly 300 research, evaluation, and demonstration projects. A central focus is on program expenditures as they relate to reimbursement, coverage, eligibility, and management alternatives under Medicare and Medicaid. Study activity also examines program impact on beneficiary health status, access to services, utilization, and out-of-pocket expenditures. The behavior and economics of health care providers and the overall health care industry are also topics of investigation.

These activities are carried out by three major components—the Office of Research, the Office of Demonstrations and Evaluations, and the Office of Operations Support. The Office of Research conducts and supports data collection efforts and research on health care providers, reimbursement, beneficiary behavior, and health care utilization. The Office of Demonstrations and Evaluations funds, manages, and evaluates pilot programs that test new ways of delivering and financing Medicare and Medicaid services. The Office of Operations Support provides ORD-wide administrative direction for its research, demonstration, and evaluation projects, which includes the budget and accounting operations; grants, cooperative agreements, and contracts-award process; and publications and information resources program.

This report provides basic information on active intramural and extramural projects in a brief format. These projects are used to assess new methods and approaches for providing quality health care while containing costs, and they often provide the basis for making critical policy decisions on health care financing issues.

Projects are arranged according to ORD budget priority areas and subject categories. The synopsis on each project includes the title, project number, project period, name and address of awardee, contractor, or grantee organization, Federal project officer with primary responsibility for the project, a brief description, and the status of the project as of September 30,1986. When a project involves research and development funds, the total funding amount for the life of the project is included. Remaining extramural projects are being conducted with waivers that permit innovations to financing and delivery of health services under the Medicare and Medicaid programs.

This is the seventh edition of the *Status Report.* Updated editions are produced on an annual basis. The information presented should be of use to policy officials, health planners, and researchers in examining the range of research and demonstration activities that are undertaken by ORD and the implications of results and findings.

Health Care Financing

Status Report

Research and Demonstrations
in Health Care Financing

U.S. Department of Health and Human Services
Health Care Financing Administration
Office of Research and Demonstrations
Baltimore, Maryland
January 1987

Office of Research and Demonstrations
Judith B. Willis, *Director*
Al Esposito, *Deputy Director*

Office of Research
J. Michael Fitzmaurice, *Acting Director*

Office of Demonstrations and Evaluations
Mary S. Kenesson, *Director*

Office of Operations Support
William F. Broglie, *Director*

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Inpatient General

Reducing Inappropriate Use of Inpatient Medical, Surgical, and Pediatric Services--Extension of the Appropriateness Evaluation Protocol

Project No.: 18-C-98317/1-02
Period: May 1983 - October 1985
Funding: $ 245,073
Award: Cooperative Agreement
Awardee: University Hospital, Inc.
75 East Newton Street
Boston, Mass. 02118
Project Officer: Sherry A. Terrell
Division of Reimbursement and Economic Studies

Description: The purpose of this cooperative agreement was to revise the Appropriateness Evaluation Protocol (AEP), a criterion-based medical record review technique, to identify the amount and reasons for inappropriate hospital use to deal with two concerns: the problem of surgical admissions which should be performed on an outpatient basis, and the problem of indications for performance of surgical procedures. The scope of this study also included conduct of a formal experimental trial to test the effectiveness of educational feedback about AEP results to hospital administrators and physicians. It was hypothesized that feedback of clinically valid profiles of appropriateness of hospital use would cause hospitals and physicians to modify behavior and change systems resulting in a reduction of inappropriate use. In addition, the instrument was modified to capture (1) appropriateness of surgical admissions, that is, level of care, inpatient versus outpatient ambulatory care procedures, (2) unnecessary preoperative care days, and (3) indications for performance of selected surgical procedures.

Status: Six Massachusetts hospitals were compared on medical and surgical services using services as the unit of analysis. In addition, in a separate study, physicians (from a teaching hospital in another northeastern State) were examined as the unit of analysis. A total of 12,071 discharges were used in the service-level analysis. Study findings suggest that the treatment and control groups had similar levels of inappropriate admissions (14.5 percent and 14.7 percent, respectively) and days (36.8 percent and 38.8 percent, respectively) in the period before the AEP intervention. The rates of inappropriate admissions declined for both groups (3.8 percent and 4.7 percent, respectively) and for days of care (2.0 percent and 1.5 percent, respectively). The fact that declines of inappropriateness rates were about the same for the control group, which was not provided feedback, as for the treatment group is thought to be an effect of the financial incentives of the State and Federal prospective payment systems. For the physician analysis, overall there was no significant difference in the improvement of inappropriateness rates between the experimental and control physicians.

The final report, entitled "Reducing the Inappropriate Use of Inpatient Medical, Surgical, and Pediatric Services," received in March 1986, is available from the National Technical Information Service, accession number PB87-112041/AS. It describes the study methodology, reports statistical tests of interrater reliability of the nurse reviewers, reports the effectiveness of the feedback in modifying hospital and physician behavior, analyzes the use of AEP overrides for the first time, addresses the content validity of the instrument, reports on the development and testing of the revisions to the instrument, and describes interrater reliability in applying the instrument to provider site (location) of surgery. The report is 314 pages and includes a bibliography, tables, charts, and graphs to support the analyses.

Appropriateness of Hospitalization: A Comparative Analysis of Reliability and Validity of the Appropriateness Evaluation Protocol and the Standardized Medreview Instrument

Project No.: 18-C-98582/5-02
Period: July 1984 - September 1986
Funding: $ 353,280
Award: Cooperative Agreement
Awardee: Michigan Health Care Education and Research Foundation, Inc.
600 Lafayette East
Detroit, Mich. 48226
Project Officer: James Beebe
Division of Beneficiary Studies

Description: The purpose of this research is to assess the relative reliability and validity of the Appropriateness Evaluation Protocol (AEP) and the Standardized Medreview Instrument (SMI) in identifying the appropriateness of medical, surgical, and gynecological admissions and days of stay in acute-care hospitals. The AEP was developed by Boston University and the SMI by Systemetrics, both under Health Care Financing Administration funding. A second focus is to estimate Detroit area rates of inappropriate care and how these rates are related to hospital characteristics and patient characteristics.

Status: The instruments have been applied to about 1,200 admissions to hospitals in the Detroit area. Results are being analyzed. A final report is expected in June 1987.

Longitudinal Studies of Local Area Hospital Use

Project No.: 18-C-98512/5-01
Period: July 1984 - July 1987
Funding: $ 214,290
Award: Cooperative Agreement
Awardee: University of Michigan
3014 Administrative Building
Ann Arbor, Mich. 48109
Project Officer: Kenneth Haber
Division of Reimbursement and Economic Studies

Description: This project will pursue longitudinal studies of local area hospital use in Michigan, tracing the 1980-82 recession, revisions to Medicare, the development of capitation and other incentive systems, and other factors affecting hospital use. Beginning in 1978, under previous Health Care Financing Administration funding, acute hospital use for 60 market-defined service areas in Michigan's lower peninsula (10 million persons) was identified and studied. Beginning in 1980, comprehensive hospitalization data have been collected annually on this population and will continue indefinitely. The data source available (Michigan inpatient data base) includes all use and can be subdivided by age and expected source of payment. Previous studies of these subgroups have indicated strong associations across groups. Analyses of the data will include:

- Changes in Medicare discharge rates, before and after adjustments for population and provider characteristics.
- Changes in the access characteristics associated with changes in the Medicare rates and population characteristics.
- Changes in the community-wide Medicare and non-Medicare discharge rates associated with growth of capitation and preferred provider organization payment.

This project was funded because continued study of Michigan will add to the conceptual understanding of hospital use, yielding theories testable elsewhere. No opportunity for a longitudinal study of a mixed rural and urban population of several million has existed before. This research will examine the stability of market areas, trends in hospital use measures, and the relationships to external socioeconomic factors. Findings could suggest several improvements in public and private policies to control hospital care costs.

Status: Reports describing hospital use in Michigan by year and community with comparisons to the preceding year have been produced for 1980, 1981, and 1982. An analysis of temporal stability of market-based communities has been completed. It indicates that market-determined communities are temporally stable, that communities respond over time, although this response is much smaller than the original cross-sectional variation, and finally, that the community response differs by surgical versus nonsurgical groups. Future research will examine the implications of implementation of

Medicare's prospective payment system (PPS). Two studies explore available measures of care to the aged pre- and post-PPS, and also compared with persons 45-65 years of age. One study tests diagnosis-related group (DRG) weights, length of stay, and record completion. The second study uses a methodology (based on the Rand list of susceptible diagnoses) for identifying the shifting of patients toward higher paying DRG's without expending additional resources (i.e., DRG "creep"). A final report is expected in July 1987.

Disproportionate Share Hospitals: Costs and Case Mix

Funding: Intramural
Project Directors: J. Michael Fitzmaurice and Kenneth Haber
Division of Reimbursement and Economic Studies

Description: Hospitals that serve a significantly disproportionate share of low-income patients are frequently called disproportionate share hospitals (DSH's). Those hospitals are often the health care "providers of last resort" for patients who cannot afford to pay for their hospital care and are not covered under Medicaid. Because of this special role, disproportionate share hospitals frequently incur costs for services provided to many of their (poor) patients for which they do not receive direct reimbursement. Tax-financed subsidies often come from the State or local governments that have jurisdiction over these hospitals, but the hospitals' patient care costs may not be fully covered by these subsidies. This leads to DSH's expenses being greater than revenues and to reduced access to hospital care for part of the population. In the Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982, the Congress directed the Secretary, Department of Health and Human Services, to consider the "special needs" of hospitals "that serve a significantly disproportionate number of patients who have low income or who are entitled to benefits" under Medicare in the application of the Section 101 total operating expense-per-case limits. In addition to TEFRA, there is also concern about the level of rates that DSH's would face under the Medicare prospective payment system. The Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1986 adjusted the PPS rates for hospitals meeting threshold criteria based on a combination of Medicaid patient utilization data and Supplemental Security Income utilization data.

Status: The data base for this study will be the 1984 Health Care Financing Administration's (HCFA) hospital Medicare cost report, a HCFA cost-per-case file, the HCFA master beneficiary file, and the Social Security Administration's Supplemental Security Income file. These files will be linked, edited, and expanded to include hospital cost and case-mix data. This study is expected to be completed in Winter 1986-87.

Analysis of Medicare Routine Costs Under Alternative Assumptions

Funding: Intramural
Project Director: J. Michael Fitzmaurice
Division of Reimbursement and Economic Studies

Description: This project grew out of a request from the Bureau of Eligibility, Reimbursement, and Coverage, Health Care Financing Administration, to examine the level of Medicare routine costs per day under alternative assumptions about the counting of labor (and false labor) room days as routine costs days. Additionally, the influence of obstetrical room days and pediatric routine days on the level of routine costs is to be investigated.

Status: Published data from the Commission on Professional and Hospital Activities, Hospital Administrative Services, and the American Hospital Association, and information derived from hospital Medicare cost reports are being used in this study. The possibility that excluding labor room days from the calculation of routine costs per day will increase the level of routine costs per day for hospitals is being investigated. Also investigated will be the possibility that excluding the costs of obstetrical room days and pediatric routine days from the costs of all other general service routine patient days (they are currently averaged together) will reduce routine costs per day. This analysis continues to be timely and is being extended beyond the analysis of 1981 hospital data.

Outpatient

Development of an Ambulatory Patient Classification System

Project No.: 18-C-98361/1-02
Period: September 1983 - December 1986
Funding: $ 713,404
Award: Cooperative Agreement
Awardee: Yale School of Organization and Management
Box 1A
New Haven, Conn. 06520
Project Officer: John T. Petrie
Division of Reimbursement and Economic Studies

Description: This project developed an outpatient classification called ambulatory visit groups (AVG's). The AVG's define the products of health care in the ambulatory setting. They classify ambulatory visits in such a way that the same amount of resources are used, on average, to treat the patient whose visit is classified in that group. The seven variables required to define the AVG's are:

- Principal diagnosis (coded according to the International Classification of Diseases, Ninth Revision, Clinical Modification).
- Procedure (coded according to the Physicians' Current Procedural Terminology, Fourth Edition).
- Age.
- Sex.
- Status of the visit (new patient, old or established patient).
- Visit disposition (admitted to hospital or "other").
- Supplemental reason for visit.

The AVG classification is based on the visit for several reasons: visit-specific data were most readily available, a visit-based system was deemed more administratively feasible, and it circumvents the problems of linking patient data regarding multiple providers and multiple illnesses. The Yale researchers began the construction of the AVG's by sorting ICD-9-CM codes into 19 major ambulatory diagnostic categories, which are analogous to the 23 major diagnostic categories used in the diagnosis-related groups. They then developed medical clusters, which are combinations of diagnostic codes within each major ambulatory diagnostic category that are meaningful for ambulatory care. Finally, Yale used statistical criteria to subdivide the diagnosis clusters further into 571 AVG's.

Status: Although this project has been extended to December 31, 1986, the researchers have completed the final determination of 571 AVG's. They have completed the definitions manual for the AVG's and the mainframe and personal computer versions of the grouping software. Yale is now writing the final report and performing validation activities. The final report is expected March 1987.

Development of a Case-Mix-Based Reimbursement Method for Hospital Outpatient Departments and Freestanding Clinics

Project No.:	18-P-98300/1-02
Period:	March 1983 - September 1986
Funding:	$ 790,108
Award:	Grant
Grantee:	Brandeis University Florence Heller Graduate School Waltham, Mass. 02139
Project Officer:	John T. Petrie Division of Reimbursement and Economic Studies

Description: The purpose of this grant is to provide the Health Care Financing Administration with case-mix and patient socioeconomic data about visits to hospital outpatient departments (OPD's) and freestanding clinics. The researchers are aiming to recommend case-mix-based methodologies capable of supporting a prospective payment system for outpatient care. Using the preliminary Yale ambulatory visit group (AVG) software, Brandeis analyzed data collected from several primary care neighborhood health centers. They are also developing their own AVG's for outpatient oncology and hematology visits, which appear to be more costly than similar visits to physicians in private practice. They are examining whether a visit, an episode of illness, or a fixed period of time would be the most appropriate unit for a prospective payment system for outpatient care.

Status: Using the old Yale AVG software, Brandeis classified the data they collected from primary care, pediatric, and obstetric-gynecologic neighborhood health centers in Boston and New York City. They compared the most common AVG's for these clinics with internists in private practice. They examined resource use for adult primary care clinics and hospital outpatient departments, comparing total resource use for patients with and without social problems. Brandeis has also collected and analyzed data on hospital outpatient visits for cancer. The researchers have obtained data on more than 600 visits from a large Boston teaching hospital's hematology-oncology clinic. They collected data in the same hospital's adult radiation therapy clinic. Brandeis has also gathered data from several other adult oncology clinics. Brandeis has continued to collaborate with Yale's ambulatory care project in order to improve and validate the new AVG software. Brandeis has also analyzed their data using the final Yale AVG grouping software. The researchers have prepared preliminary papers describing the implications of ambulatory visit groups for hospital outpatient departments and comparing case mix and charges for inpatient versus outpatient chemotherapy. A final report is expected in late 1986.

Case Mix and Resource Use in Hospital Emergency Room Settings

Project No.: 18-C-98310/9-02
Period: March 1983 - March 1986
Funding: $ 595,227
Award: Cooperative Agreement
Awardee: University of California
School of Public Health
405 Hilgard Avenue
Los Angeles, Calif. 90024
Project Officer: John T. Petrie
Division of Reimbursement and Economic Studies

Description: This study developed a patient classification scheme for hospital emergency room patients for both teaching and nonteaching settings. The investigators collected and analyzed data for a sample of about 20,000 patients in three Los Angeles area community hospitals. They collected three types of patient-specific data: provider time, medical records, and billing data. Their extensive time and motion studies at these hospitals yielded the provider-time data base. After merging the data bases, a cost-finding process was conducted to derive direct costs for various ancillary cost centers. They also derived total direct physician costs and nonphysician direct care costs. They contructed major diagnostic categories (MDC's) on the basis of principal diagnosis and developed "emergency department groups" based upon the MDC's.

Status: The project resulted in the formation of a total of 216 emergency department groups using four types of variables: diagnoses, disposition, age, and physician procedures. In addition, the researchers analyzed data for about 15,000 emergency room visits to a large teaching hospital, the University of California, Los Angeles, Emergency Medicine Center. They used the teaching hospital data to test the validity of the emergency department groups. The final report, which was submitted in September 1986, explains the methodology of the emergency department groups classification scheme in detail.

Incorporating the Cost of Ambulatory Care into Case-Mix-Based Hospital Reimbursement

Project No.:	18-C-98426/3-02
Period:	September 1983 - September 1985
Funding:	$ 210,000
Award:	Cooperative Agreement
Grantee:	Blue Cross of Western Pennsylvania One Smithfield Street Pittsburgh, Pa. 15222
Project Officer:	John T. Petrie Division of Reimbursement and Economic Studies

Description: This project developed a hospital outpatient classification methodology by expanding upon the "patient management categories" (PMC's), which Blue Cross of Western Pennsylvania developed under a previous Health Care Financing Administration grant. The approximately 800 PMC's define the diverse hospital resources required to manage clinically distinct patient types. The clinical definitions of PMC's are based on the reason for the hospital admission and combination of discharge diagnoses. Using ambulatory surgery data from seven area hospitals, the researchers identified a potential list of ambulatory procedures. A panel of physicians reviewed this list to confirm that the procedures could be managed in ambulatory settings. The physicians ensured that the process of identifying these procedures met acceptable medical criteria, such as having a low risk of postoperative complications or a stay of relatively short duration. The researchers then assigned hospital costs to each outpatient service to derive cost-based weights on the same scale as the inpatient PMC's. They analyzed hospital inpatient and outpatient data to form a measure of the costliness of a hospital's overall patient mix. Each of the different ambulatory services and procedures was considered as a separate component of a visit, and, therefore, each service or procedure had a specific component cost.

Status: The researchers identified 67 PMC's that would be likely candidates for ambulatory management. These 67 PMC's were recommended because of changing medical practice, application of medical guidelines for ambulatory care, opinions of authoritative medical sources, and first-hand experiences of a nurse research assistant. The resulting integrated PMC's are intended to reduce the current reimbursement focus on location of services. The researchers have completed a final report detailing the classification of all hospital-based ambulatory services and procedures with the associated relative cost-based weights. The computer software necessary to identify patient types that can be effectively managed in ambulatory settings is available from the Pittsburgh Research Institute, 301 Fifth Avenue Building, Pittsburgh, Pa. 15222.

New York State Ambulatory Care Reimbursement Project

Project No.: 11-C-98574/2-01
Period: September 1984 - August 1987
Award: Cooperative Agreement
Awardee: New York State Department of Social Services
40 North Pearl Street
Albany, N.Y. 12243
Project Officer: Joe Cramer
Division of Hospital Experimentation

Description: The New York State Department of Social Services and the Office of Health Systems Management jointly submitted this proposal. The awardee will develop and implement a prospective ambulatory care reimbursement methodology for both freestanding clinics and hospital-based ambulatory care services that is predicated on a uniform cost comparison by a patient-care service classification. The methodology will include adjustments to costs directly dependent on case mix, and also will employ norms to ensure efficient production of services. The project's activities can be divided into three main stages:

- Development of a patient-care classification system that associates resource use with patient/service characteristics in homogenous product groups.
- Creation of reimbursement rates constructed from two components: a fixed price for the direct costs of a product and a variable cost derived from each facility's indirect costs.
- Implementation and evaluation of the new system in two selected demonstration areas: the Bronx and the Northeast New York State Region.

New York feels that the result of this 3-year demonstration will be a greater understanding of the fundamental elements of ambulatory care costs, and, more importantly, the use of an equitable reimbursement policy for pricing ambulatory care in a manner that will promote economical delivery of health care and prudent cost growth.

Status: Now completed, the first activity was to describe and categorize the case mix of hospital outpatient clinics and freestanding diagnostic and treatment centers in the two demonstration areas. To gather this information, a patient visit survey was created and over 10,000 visits were surveyed in 33 facilities. New York is completing the clustering of the patient survey data collected into similar product groups based on the value of resources used to provide a service. A resource weight for each visit was established by assigning a relative value to all labor and ancillary data elements. Resource weights were used as dependent variables to explore patient/service/facility relationships. The objective is to associate services with particular patients based on similar patterns of resource use. It is expected that there will be approximately 25 product groups. Pricing of the product groups is also underway. New York is trying to determine how much of the costs reported by the facilities should be uniformly related to the product groups as developed. They are also trying to determine how the payments should be adjusted to accomodate facility differences related to capital, teaching, administation, etc., and a completed payment methodology is expected by October 1986. Because the above activities fell behind schedule, New York plans to submit a waiver application by November 1986 proposing a Medicare and Medicaid demonstration beginning in January 1987.

Hospital Prospective Payment

National Hospital Rate-Setting Study

Project No.: 500-78-0036
Period: August 1978 - September 1986
Funding: $ 6,293,070
Award: Contract
Contractor: Abt Associates, Inc.
55 Wheeler Street
Cambridge, Mass. 02138
Project Officer: Jeff McCombs
Division of Hospital Experimentation

Description: This is the evaluation of the impact of 15 hospital prospective reimbursement programs. The study focuses on the following eight areas:

- Hospital revenue, expenditures, and financial viability.
- Volume of hospital services.
- Hospital payroll costs and staffing.
- Patient care.
- Hospital capital formation, competition, and industrial structure.
- Hospital organization and administrative behavior.
- Access to hospital services.
- Medicare hospital and nonhospital costs.

The majority of the above studies cover the period 1970-79. In addition, updates on program impacts in more recent years in the areas of volume of services and payroll and staffing (up to 1981), and patient care and revenue and expenditures (up to 1983) will be available.

Status: Final reports covering three of the above eight areas are currently available through the National Technical Information Service:

- "The Impact of State Hospital Prospective Reimbursement Programs on Medicare Hospital and Nonhospital Costs," accession number PB84-181544.
- "The Impact of State Hospital Prospective Reimbursement Programs on Hospital Capital Formation, Competition, and Industrial Structure: An Evaluation," accession number PB84-181445.
- "The Impact of Prospective Reimbursement on Hospital Payroll Costs and Staffing," accession number PB84-181403.

Final reports covering the remaining areas will become available in early 1987.

Incentive Prospective Payment System for Hospitals Through Fiscal Intermediaries (Massachusetts)

Project No.: 95-P-98199/1-01
Period: September 1982 - September 1986
Award: Grant
Grantee: Massachusetts Hospital Association
5 New England Executive Park
Burlington, Mass. 01803
Project Officer: Diane Rogler
Division of Hospital Experimentation

Description: This statewide, all-payer, prospective hospital reimbursement project was conducted by the Massachusetts Hospital Association for Medicare and by the Massachusetts Department of Public Welfare for Medicaid. The payment methodology was based on a contract (HA-29) for the first and second years and (HA-30) for the third year, which was between the hospitals and Blue Cross of Massachusetts. Hospital payments, including both inpatient and outpatient, are based on the "maximum allowable cost" (MAC) methodology which uses the actual fiscal year 1981 base-year costs, adjusted annually for inflation, volume changes, and certain exceptions. Each year, the amount paid to hospitals by Medicare and Medicaid is reduced by a 2-percent productivity factor. The payment system was administered by Blue Cross of Massachusetts. The Massachusetts Rate-Setting Commission approved each hospital's gross patient-service revenue based on its review of the Blue Cross MAC cost report and provided an oversight function. The rate of increase in Medicare hospital expenditures in Massachusetts was capped at the average rate of increase experienced by Medicare nationwide. If total Medicare hospital costs had been less than 1.5 percent below the national average rate of increase, the hospitals would have shared in half of the savings.

Status: For 99 of the 108 hospitals, the demonstration ended on September 30, 1985. For the nine hospitals that have a July-June fiscal year, the demonstration ended on June 30, 1986. The most current Medicare expenditure data available show that the Medicare payments to Massachusetts hospitals exceeded the maximum liability cap relative to the first and second years of the demonstration. The cap overpayment is being recouped from the hospitals in quarterly installments. Early in 1987, data will be available to include the third year in the cap calculations. The expenditure data and the cap calculations will be updated annually for the next several years as the audits are completed and the settlements finalized.

Rochester Area Hospitals' Corporation

Project No.: 95-P-97501/2-02
Period: January 1980 - December 1986
Award: Grant
Grantees: State of New York/Rochester Area Hospitals' Corporation
Empire State Plaza Tower Building
Albany, N.Y. 12237
Project Officer: Victor McVicker
Division of Hospital Experimentation

Description: The Rochester Area Hospitals' Corporation (RAHC) Hospital Experimental Payment (HEP) program is a test of whether an areawide budget system will be effective in controlling hospital costs in a metropolitan area, and whether local decisionmaking can effectively allocate financial resources between hospitals to cover the cost of new services. This 7-year project, which includes all third-party payers (Medicare, Medicaid, and Blue Cross), was initiated January 1, 1980, and includes nine hospitals in the Rochester area of New York. HEP places an upper limit or cap on the total revenue paid to the community's hospitals for all patient care. Each participating hospital's revenue for 7 years is guaranteed at a base level, calculated primarily from the hospital's 1978 costs, trended forward to reflect inflation. In addition, a 2-percent contingency fund is administered by RAHC to pay for increased hospital services and new and improved medical technology and to provide working capital for participating hospitals.

Status: In terms of total Medicare hospital costs, HEP has increased at a rate less than the Nation as a whole. Total Medicare payments under the demonstration (1980-84) increased at an average annual rate of 10.9 percent, whereas the national average Medicare annual rate was 16 percent. In 1985, the rate of increase in total Medicare hospital was 5.2 percent, whereas the national average Medicare annual rate of increase was 6.5 percent. The demonstration is scheduled to end December 31, 1986. RAHC and the State of New York have requested the continuation of the demonstration for the optional year. HCFA is still in the process of reviewing their request. HEP has also indicated an interest in continuing the project beyond 1986 pursuant to Medicare program waiver authority 1886(c).

Finger Lakes Area Hospitals' Corporation

Project No.: 95-P-97877/2-01
Period: January 1981 - December 1986
Award: Grant
Grantee: Finger Lakes Area Hospitals' Corporation
One Franklin Square
Geneva, N.Y. 14456
Project Officer: Victor McVicker
Division of Hospital Experimentation

Description: The Finger Lakes Area Hospitals' Corporation (FLAHC) is a test of whether an areawide budget system will be effective in controlling hospital costs in a rural area, and whether local decisionmaking can effectively allocate financial resources between hospitals to cover the cost of new services. This 6-year project, which includes all third-party payers (Medicare, Medicaid, and Blue Cross), was initiated January 1981, and includes seven hospitals in the rural Finger Lakes area of New York. The FLAHC payment program places an upper limit or cap on the total revenue paid to the community's hospitals for all patient care. Each participating hospital's revenue for 6 years is guaranteed at a base level, calculated primarily from the hospital's 1979 costs, trended forward to reflect inflation. In addition, a 2-percent contingency fund is administered by FLAHC to pay for increased hospital services and new and improved medical technology, and to provide working capital for participating hospitals.

Status: During the period 1981-85, Finger Lakes Hospital Experimental Payment (FLHEP) program rates of increase have been less than the national average rates of increase in hospital costs. In terms of total Medicare hospital costs, FLHEP has increased at a rate substantially less than the Nation as a whole. The FLHEP average annual rate of increase in total Medicare hospital costs for the 5-year period 1981-85 was 6.9 percent, whereas the national average annual rate of increase was 12.1 percent. The demonstration is scheduled to end December 31, 1986. FLHEP has indicated an interest in continuing the research and demonstration project beyond 1986 pursuant to Medicare program waiver authority 1886(c). Necessary conversion activities have been undertaken during 1986.

Proposal for the Development of a Hospital Reimbursement Methodology for New York State for the 1980's

Project No.:	95-P-98216/2-01
Period:	January 1983 - December 1985
Award:	Grant
Grantee:	State of New York Department of Health Empire State Plaza Tower Building, Room 1043 Albany, N.Y. 12237
Project Officer:	Joe Cramer Division of Hospital Experimentation

Description: This 3-year project is a test of an inpatient-only prospective per diem payment system for all payers in the State. Rates are determined using 1981 costs as the base. Base-year allowable costs are calculated through the use of peer-group comparisons, with ceilings on ancillary costs and a combined routine cost/length-of-stay ceiling. Once allowable costs were determined, rates for 1983 were calculated by inflating the costs by a trend factor. In 1984 and 1985, a "rate-to-rate" methodology was applied. Adjustments to the prospective rates are limited to significant changes in volume, case mix, services provided, and increases in labor costs. The system provides for the establishment of bad debt and charity-care pools on a regional basis to be supported by the payers in the amounts of 2 percent in 1983, 3 percent in 1984, and 4 percent in 1985. In addition, there are also payer add-ons to the basic rate for a discretionary fund to provide working capital and a transition fund to assist hospitals severely impacted by the transition of Medicare to the New York system. Administration of the payment system is carried out by the State Health Department's Office of Health Systems Management (OHSM). OHSM is responsible for computation of individual hospital revenue caps based on legislation and regulations. Once the revenue caps are established, the fiscal intermediaries calculate Medicare rates for New York hospitals.

Status: The demonstration ended on December 31, 1985; however, several major reimbursement adjustments still remain to be completed in order to finalize the payments. These include adjustments for the final 1985 trend factor, case-mix changes for 1984 and 1985, and capital for 1985. The 1985 annual status report and a final report will be submitted to the Health Care Financing Administration, along with updated maximum liability cap calculations, after the expenditure data has been finalized. The last cap calculations received indicated that, for the first and second years of the demonstration, New York met the requirements of the Medicare cap by a comfortable margin, and that it is unlikely that the cap will be exceeded over the 3-year demonstration when all of the data have been finalized.

Selected Analyses of the Prospective Payment System's Impact on Hospitals' Behavior

Project No.: 18-C-98606/3-03
Period: July 1984 - December 1987
Funding: $ 484,433
Award: Cooperative Agreement
Awardee: The Urban Institute
2100 M Street, NW.
Washington, D.C. 20037
Project Officer: Stuart Guterman
Division of Reimbursement and Economic Studies

Description: This project is in support of the prospective payment system (PPS) evaluation that is congressionally mandated under the Social Security Amendments of 1983 (Public Law 98-21). It will analyze the impact of the Medicare hospital PPS on three types of hospital behavior: the provision of services to Medicare beneficiaries by hospital outpatient departments; the discharge of Medicare beneficiaries to and provision of long-term care and home health services; and changes in hospitals' corporate structure and internal organization. Other aspects of hospital behavior, including measures of utilization and costs, will also be examined. The analysis is to be based primarily on data from a series of hospital surveys conducted by the Urban Institute and the American Hospital Association (AHA). Data on hospital revenue and expenses in 1980 and 1982 will be used to project expected hospital performance in a pre-PPS environment and compared with data on actual hospital performance in 1984 and 1985.

Status: Preliminary analysis of data from 1980, 1982, and 1984 has begun. During the coming year, this analysis will continue, and AHA data on hospital performance during 1985 will be added to the analysis.

Prospective Payment in Rehabilitation Hospitals and Programs

Project No.: 15-C-98705/5-01
Period: October 1984 - March 1986
Funding: $ 724,000
Award: Cooperative Agreement
Awardee: Medical College of Wisconsin/Rand Corporation
1000 North 92nd Street, Room 2166
Milwaukee, Wis. 53226
Project Officer: John C. Langenbrunner
Division of Reimbursement and Economic Studies

Description: A cooperative agreement was awarded, effective October 1984, to the Medical College of Wisconsin (MCW) to obtain rehabilitation patient-record and cost data from approximately 8,000 medical charts at 100 rehabilitation hospitals and units across the Nation. The Rand/University of California, Los Angeles, Health Financing Policy Research Center designed the MCW data collection project and conducted the analysis required to investigate the feasibility of a case-mix classification system for Medicare reimbursement of medical rehabilitation hospitals.

Status: Section 603 of Public Law 98-21, Social Security Amendments of 1983, calls for studies incorporating excluded hospitals (such as rehabilitation hospitals) into the Medicare prospective payment system (PPS). The project has provided findings to assist the Health Care Financing Administration in considering PPS for rehabilitation hospitals.

The Rand/MCW research results indicate that:

- Differences to date, in average length of stay and charges, exist among types of rehabilitation facilities, with hospitals generally exhibiting longer stays and lower per diem charges.
- The vast majority (approximately 85 percent) of rehabilitation patients are received from acute-care hospitals.
- Three conditions--stroke, hip fractures, and arthritis--account for approximately two-thirds of rehabilitation services for the Medicare elderly.
- Functional status and additional measures of patient condition predict resources in expected directions.
- Multivariate analysis of diagnostic condition, functional status, and additional patient-level measures explain one-third of the variation in charges for rehabilitation stays.

Annual Reports to Congress on the Impact of the Medicare Hospital Prospective Payment System

Funding: Intramural
Project Director: Stuart Guterman
Division of Reimbursement and Economic Studies

Description: Section 603 of Public Law 98-21 requires the Secretary of Health and Human Services to study and report annually to Congress on the impact of the Medicare prospective payment system (PPS) for hospitals. These reports to Congress, beginning in 1984 and ending in 1987, are to focus on the impact of PPS on classes of hospitals, beneficiaries, and other payers for inpatient hospital services, and, in particular, on the impact of computing diagnosis-related groups prospective payment rates by census division, rather than exclusively on a nationwide basis.

Status: The first annual report has been released, and includes a discussion of the background of the Medicare hospital prospective payment system (PPS), an outline of the objectives of this multiyear evaluation effort, and a presentation of preliminary findings from the first year of PPS. The second annual report, currently in preparation, will further analyze some of the findings from the first year of PPS and will present data from the second year of the new payment system. In addition, several additional topics (as discussed in the following project write-up) are to be addressed in the second annual report, according to congressional mandate. The remaining annual reports are to continue the analysis begun in the first two reports and address the additional issues specified in the congressional mandate.

Studies of Issues to be Included in Prospective Payment System Reports to Congress

Funding: Intramural

Description: Section 603 of Public Law 98-21 requires the Secretary of the Department of Health and Human Services to include the results of the following studies in the prospective payment system reports to Congress for 1985:

- The feasibility and impact of eliminating or phasing out separate urban and rural prospective payment rates for diagnosis-related groups (DRG's).
- Whether and how hospitals not currently paid according to the prospective payment system (PPS) methodology under Medicare can be paid on a prospective payment basis.
- The appropriateness of the PPS methodology for compensating hospitals for the additional expenses of outlier cases, and the advisability and feasibility of applying severity of illness, intensity of care, or other modifications to prospective payment rates for DRG's.
- The feasibility and desirability of applying the PPS methodology to payment by all payers for inpatient hospital services.
- The impact of PPS on hospital admissions, and the feasibility of making a volume adjustment in the prospective payment rates for DRG's or requiring preadmission certification to minimize the incentive to increase admissions.

Topic: Urban/Rural Rates
Project Director: Philip Cotterill
Division of Reimbursement and Economic Studies

Status: In addition to the mandate under Public Law 98-21, Public Law 98-369 requires reports on several other urban/rural issues. A single report on urban/rural issues is being prepared that addresses:

- Elimination of the urban and rural differential in standard payment amounts.
- Retention of regional standard payment amounts after the 3-year transition.
- Refinement of the ways in which standard payment amounts might be blended on a regional or diagnosis-related-group (DRG) specific basis.
- DRG-by-DRG variation in the labor share of payment that is adjusted by the wage index (to determine whether rural hospitals are disadvantaged in DRG's with high nonlabor costs).

The Health Care Financing Administration (HCFA) is conducting econometric and other analyses on the importance of various factors in explaining urban/rural and regional differences in hospital costs, investigating alternative ways of defining and adjusting the standard payment amounts on Medicare payments to different types of hospitals, and conducting simulations of the effects of alternative ways of defining and adjusting the standard payment amounts on Medicare payments to different types of hospitals. Analyses also are being conducted for HCFA by the Center for Health Economics Research under the cooperative agreement with the Brandeis University Health Policy Research Consortium.

Topic: Excluded Hospitals and Units
Project Directors: John C. Langenbrunner, Patricia Willis, and Stephen F. Jencks
Division of Reimbursement and Economic Studies

Status: The National Institute of Mental Health, with funds transferred from the Health Care Financing Administration (HCFA), awarded a contract during the third quarter of fiscal year 1984 for the investigation and development of alternative patient classification systems for psychiatric and alcohol and drug abuse hospitals and units. Additional studies on this topic, not funded by HCFA, are to be monitored. The National Association of Children's Hospitals and Related Institutions was awarded a cooperative agreement by HCFA during the fourth quarter of 1984 for the investigation and development of alternative pediatric classification systems. The Medical College of Wisconsin (MCW) was awarded a cooperative agreement by HCFA at the beginning of the first quarter of 1985 for the collection of patient record data in rehabilitation hospitals and units. The Rand Corporation/University of California, Los Angeles, Health Financing Policy Research Center is participating in the design of the MCW project and the development of alternative patient classification systems for rehabilitation facilities. The Brandeis University Health Policy Research Consortium has investigated the characteristics (e.g., geographic distribution) of long-stay hospitals. The Brandeis Consortium has also provided assistance in the development of a conceptual framework for consideration of the method of inclusion of these hospitals under prospective payment. A range of studies on all of these topics conducted outside the Department have also been monitored, reviewed, and synthesized for the congressional report.

Topic: DRG Refinements
Project Director: Stephen F. Jencks
Division of Reimbursement and Economic Studies

Status: Intramural work in this area includes studies of the relative costliness of care to different classes of Medicare beneficiaries, the appropriateness and distribution of Medicare outlier payments, and the effect of removing nonacute care from a data base on the homogeneity of diagnosis-related groups (DRG's). Extramural work included four projects at the Rand Corporation/University of California, Los Angeles, Health Financing Policy Research Center: the effect of the prospective payment system (PPS) on hospital accounting profits; comparison of alternative classification systems; review of literature on DRG's; and study of the effect of "decompressing" DRG weights. Extramural work at the Brandeis Consortium focuses on examination of variation in practice patterns across hospital types, physician specialties, and regions. Draft final reports on all of these projects have been received. Work in progress at Rand focuses on validaton of a method for estimating costs from current-year charges and a study of the characteristics of outliers. Work in progress at Brandeis/Boston University includes a study of alternative outliers payment systems and an evaluation of MedisGroups (a severity measurement system). The Brandeis Consortium, through the Center for Health Economics Research, is conducting a study of variation in treatment patterns within DRG's, to be included in the congressional report. An intramural study of outlier payments is being conducted, and the Rand/UCLA Center is to conduct an expanded analysis of this issue.

Topic: The Relationship of Medicare PPS to All-Payer Systems and Cost Shifting
Project Director: William J. Sobaski
Division of Reimbursement and Economic Studies

Status: The Brandeis Consortium has examined how State rate-setting systems, which apply to all payers, differ from Medicare's prospective payment system and how other payers (government and private) have employed DRG's in prospective payment for inpatient care. It also examined available information on cost shifting under "all-payer" and "limited-payer" State systems. This report is expected to be submitted to Congress in January 1987.

Topic: Impact of Medicare PPS on Hospital Admissions
Project Director: William J. Sobaski
Division of Reimbursement and Economic Studies

Status: The Rand/UCLA Center has conducted an analysis of the impact of Medicare prospective payment on hospital admissions, hospital incentives related to the volume of admissions, and relevant policy options. This report was submitted to Congress in September 1986.

Prospective Payment and Analytical Support Studies

Project No.: 500-85-0015
Period: September 1985 - September 1988
Funding: $ 5,241,322
Award: Contract
Contractor: Abt Associates, Inc.
55 Wheeler Street
Cambridge, Mass. 02138
Project Officer: Sydney P. Galloway
Office of Operations Support

Description: This project is intended to provide survey design, data collection, and statistical analysis in support of the congressionally mandated (Public Law 98-21) annual report on the impact of the Medicare hospital prospective payment system (PPS), other congressionally mandated reports, and other PPS-related studies. Individual work assignments to be made throughout the project will focus on specific topics relevant to these studies and reports.

Status: As of September 30, 1986, 23 work assignments had been made under this contract. These work assignments fall under several general headings:

- Impact on hospitals.
- Impact on Medicare beneficiaries.
- Impact on other payers for inpatient hospital services.
- Impact on other providers of health care.
- Impact on Medicare program operations and expenditures.
- Data collection and manipulation, special studies, and project management and coordination.

Project No.: 500-86-0017
Period: April 1986 - October 1988
Funding: $ 1,400,000
Award: Contract
Contractor: System Sciences, Inc.
4330 East-West Highway
Bethesda, Md. 20814
Project Officer: Sydney P. Galloway
Office of Operations Support

Description: This is a companion contract to the previous contract 500-85-0015 with Abt Associates, and it deals with areas not covered by ABT or by other cooperation agreements or contracts.

Status: As of September 30, 1986, five work assignments had been made under this contract. They involved the impact of PPS on the provision of physician services and the availability and utilization of post-hospital subacute care (after care).

Prospective Payment System and Post-Hospital Care: Use, Cost, and Market Changes

Project No.: 18-C-98852/3-02
Period: September 1985 - March 1988
Funding: $ 706,118
Award: Cooperative Agreement
Awardee: Georgetown University
Center for Health Policy Studies
2233 Wisconsin Avenue, NW.
Washington, D.C. 20007
Project Officer: Judith Sangl
Division of Reimbursement and Economic Studies

Description: The purpose of the project is to determine how much the hospital prospective payment system (PPS) shifts care from the hospital to skilled nursing facilities (SNF's) and home health providers, and to analyze the impact of this shift on total costs to Medicare and on changes in SNF characteristics that are likely to cause an increase in use by Medicare beneficiaries in the future. Medicare claims will be analyzed to determine how PPS has affected total service use (hospital, SNF, and home health) and costs for hospitalized patients. In addition, SNF's will be surveyed to identify changes in nursing home patients, services, and market structure likely to affect Medicare use. The survey will be supplemented with data from the Medicare/Medicaid Automated Certification System, SNF cost reports, and other sources.

Status: During its first year, the project carried out the following activities:

- Developed and pretested nursing home mail survey instruments.
- Fielded the survey and began analyses of responses.
- Conducted telephone survey of home health agencies around the country to obtain perceptions of PPS impacts.
- Completed three-stage sampling process of study hospitals.

Impact of Medicare's Prospective Payment System and Private Sector Initiatives: The Blue Cross and Blue Shield Organization's Experiences

Project No.:	15-C-98757/5-01
Period:	September 1985 - August 1987
Funding:	$ 270,000
Award:	Cooperative Agreement
Awardee:	Blue Cross and Blue Shield Association 676 North St. Clair Chicago, Ill. 60611
Project Officer:	Timothy Greene Division of Reimbursement and Economic Studies

Description: This congressionally mandated study (Public Law 98-21) is intended for evaluation of the impact of the Medicare prospective payment system (PPS) and Blue Cross/Blue Shield cost-containment strategies on the cost and use rate experience of the Blue Cross/Blue Shield plans, both nationally and on an individual basis. In addition, the interaction effect between PPS and Blue Cross/Blue Shield cost-containment strategies is to be analyzed. National Blue Cross/Blue Shield data and data collected from individual Blue Cross/Blue Shield plans are to be used in the study, supplemented by secondary data from other sources.

Status: Initial analysis of trends in cost and utilization rates for Blue Cross/Blue Shield plans has begun. The results of this analysis have been incorporated into the 1985 Annual Report to Congress on the impact of PPS. Additional data from the individual Blue Cross/Blue Shield Plans are being assembled for use in more detailed analyses to be included in future reports to Congress.

A Study of the Impact of Medicare's Hospital Prospective Payment System on the Blood Banking Industry

Project No.:	500-85-0028
Period:	April 1985 - February 1986
Funding:	$ 150,136
Award:	Contract
Contractor:	Lawrence Johnson and Associates, Inc. 4545 42nd Street NW., Suite 103 Washington, D.C. 20016
Project Officer:	William J. Sobaski Division of Reimbursement and Economic Studies

This project was an exploratory study undertaken to analyze literature reviews, surveys, and on-site visits involving several Washington, D.C., and Richmond, Virginia, hospitals, inquiries to organizations in the blood field, and review of administrative statistics about blood usage.

Status: The project has been completed. Findings from this project indicate that:

- Professional associations generally supported the conclusion that blood supplies will not be affected in terms of delivering required products.
- Most hospitals foresaw no effect on sources of whole blood, but some felt some blood products could become more difficult to obtain.
- Acquired immune deficiency syndrome (AIDS) was viewed as the major factor endangering the adequacy of blood supplies.
- Many hospitals felt it will not be economical to expand the blood collection efforts.
- National average blood center prices remained stable between 1983 and 1985, but there has been greater use of autologous blood apparently in response to concerns about AIDS.
- Most hospitals felt that the prospective payment system (PPS) was leading to more effective provider management of information for use in optimizing services and cost and had stimulated further competitive buying arrangements, strengthening of serological testing, increased recovery and salvaging, and greater use of maximum blood-order scheduling systems.

Results will be published in the 1985 Annual Report to Congress on the impact of PPS. The final report is available from the National Technical Information Service:

- "A Study of the Impact of Medicare's Hospital Prospective Upon the Blood Banking Industry," accession number PB86-180155/AS.

Learning From and Improving Diagnosis-Related Groups for End Stage Renal Disease Patients

Project No.: 14-C-98596/3-02
Period: September 1984 - May 1987
Funding: $ 350,000
Award: Cooperative Agreement
Awardee: The Urban Institute/Health Policy Center
2100 M Street, NW.
Washington, D.C. 20037
Project Officer: Paul W. Eggers
Division of Beneficiary Studies

Description: The introduction of prospective payment by diagnosis-related groups (DRG's) has drastically altered the incentives in medical care. The purpose of this project is to study the responses of providers at the level of individual patients and diagnoses in end stage renal disease, an area on which abundant data are available. Specific issues to be addressed include the possibility of selection of diagnoses to maximize reimbursement, alteration of discharge and admission patterns and other forms of cost shifting, and the selection of patients for admission. Specifically, patients will be characterized in terms of major demographic and prognostic factors, including measures of severity of illness. Patterns of diagnostic categorization, admission patterns, and treatment costs will be compared for homogenous groups before and after the prospective payment system.

Status: Analytical files have been created and analysis has begun. As of August 1986, five working papers have been drafted and are under review. Five more papers are due for completion by May 1987.

Analysis of the Incidence and Cost of Outlier Cases Under the Prospective Payment System

Funding: Intramural
Project Director: Stuart Guterman
Division of Reimbursement and Economic Studies

Description: Section 603 of Public Law 98-21 requires the Secretary of Health and Human Services to examine the appropriateness of the payment policy for outlier cases (exceptionally long or costly cases) under the prospective payment system. This project is intended to examine the distribution of outlier cases and the costs of and payment for these cases by patient and hospital characteristics, in order to indicate ways in which the outlier payment methodology can be refined to better accomplish its objectives.

Status: Some preliminary analysis of case- and hospital-level data from fiscal year 1984 has been conducted. Additional analysis of fiscal year 1984 data is planned as well as analysis of fiscal year 1985 data when they become available. Complementary studies are being conducted by the Health Policy Research Centers at Boston University and the Rand Corporation.

Swing Bed

Evaluation of National Rural Swing-Bed Program

Project No.:	500-83-0051
Period:	September 1983 - November 1987
Funding:	$ 1,121,824
Award:	Contract
Contractor:	Center for Health Services Research University of Colorado Health Sciences Center 1355 South Colorado Boulevard Denver, Colo. 80222
Project Officer:	Herbert A. Silverman Division of Program Studies

Description: This project is congressionally mandated by the Omnibus Reconciliation Act of 1980 (Public Law 96-499). The legislation permits hospitals with fewer than 50 beds that are located in rural areas with a shortage of long-term care beds to "swing" their beds between acute and long-term care as needed. The evaluation will assess the impact on:

- Access to long-term care beds in rural areas.
- Quality of long-term care in hospitals.
- Cost of services in swing-bed hospitals.
- Program-wide costs.
- Administrative costs to administer and monitor the program.

Based on the findings and recommendations derived from this evaluation, Congress will decide whether to continue the program or extend it to larger hospitals. The Medicare hospital prospective payment system (PPS) was instituted for hospital fiscal years beginning on or after October 1, 1983. It is perceived that PPS has had an effect on hospital lengths of stay and on the condition of patients at the time of discharge. This could have a significant impact on the use of swing beds. The scope of work for this contract was expanded in 1985 to assess the impact of PPS on the swing-bed program.

Status: Collection of data from the hospital cost reports for fiscal years 1984 to present has been slow because of the adjustments to the new cost-reporting requirements under PPS. The initial report on the experiences of the swing-bed program is expected in early 1987. This evaluation was mandated by Congress. A subsequent evaluation assessing the impact of PPS is expected in late 1987. The findings of this study will be incorporated into the Annual Report to Congress on the impact of PPS.

Case Mix

Diagnosis-Related Groups Refinement Using Measures of Disease Severity

Project No.:	18-C-98761/9-01
Period:	September 1985 - September 1986
Funding:	$ 325,000
Award:	Cooperative Agreement
Awardee:	SysteMetrics, Inc. 104 West Anapamu Street Santa Barbara, Calif. 93101
Project Officer:	Timothy F. Greene Division of Reimbursement and Economic Studies

Description: The objective of the project is to refine the diagnosis-related groups (DRG's) system to better account for variation in disease severity and to thereby develop a system that could increase the equity of hospital reimbursement under the Medicare prospective payment system. Alternative patient groupings that will make refinements to current DRG's will be developed, based on stage of disease, unrelated comorbidity, and age. The disease-staging methodology developed by the awardee will be used to measure stage of disease. Unrelated comorbidities (secondary medical problems) which increase resource requirements of hospitalization will be identified. The alternative groupings will be validated and compared with current DRG's.

Status: The study was revised to reflect the Office of Research and Demonstrations' research priorities and data availability. The awardee has constructed an analysis file of approximately 2.5 million 1984 Medicare discharges. The research focuses on 61 DRG's accounting for approximately 40 percent of Medicare discharges. The awardee has completed definition and validation of alternative patient groupings.

Methods to Improve Case Mix and Severity of Illness Classification for Use in the Medicare Prospective Payment System

Project No.: 18-C-98840/1-02
Period: September 1985 - August 1988
Funding: $ 1,013,395
Award: Cooperative Agreement
Awardee: The Health Data Institute
20 Maguire Road
Lexington, Mass. 02173
Project Officer: Patricia Willis
Division of Reimbursement and Economic Studies

Description: This congressionally mandated study (Public Law 98-21) will undertake several activities for improving the diagnosis-related groups (DRG's) classification system. The project objectives are:

- To develop a model Medicare claims data base for the purpose of investigating what improvements might readily be made to the prospective payment system using Parts A and B claims data.
- To support the investigation of alternative Health Care Financing Administration's (HCFA) reimbursement policies, including hospital payments, physician payments, and capitation.
- To test a method to predict resource use within DRG's using a limited number of clinical indicators available only in medical records.
- To test the methodology in selected DRG's.
- To validate the pilot results on another data base.

The study applies two data bases to accomplish these objectives: (1) the Colorado Blue Cross/Blue Shield data base with Medicare Parts A and B claims ("Colorado study"), and (2) a pilot data base of clinical indicators of resource use abstracted from medical records for targeted DRG's in both teaching and community hospitals in the Boston area ("Boston pilot").

Status: During the first year of the project, the Health Data Institute (HDI) developed and implemented a methodology to test the feasibility of collecting specific information from patient medical records as possible predictors of resource use. Concurrently, HDI obtained more than 2 years of available Medicare Part A and Part B claims data for services rendered to beneficiaries in Colorado. In addition, HDI obtained HCFA eligibility data for beneficiaries generating these claims. By the end of July 1987, HDI expects to complete pilot testing and validation of the use of selected clinical indicators as predictors of resource use for acute inpatients with diverse illnesses. On completion of this phase, HDI expects to develop detailed results for at least eight disease areas encompassing approximately 12-15 DRG's. Additionally, HDI will proceed with analysis of the Colorado Part A and Part B claims data. Preliminary findings have been presented to HCFA.

Disease-Specific Severity Adjustments to Diagnosis-Related Groups

Project No.: 15-C-98833/6-02
Period: January 1986 - December 1987
Funding: $ 280,129
Award: Cooperative Agreement
Awardee: Tulane School of Public Health and Tropical Medicine
1430 Tulane Avenue
New Orleans, La. 70112
Project Officer: Joel H. Broida
Division of Program Studies

Description: This study is an empirical investigation of the efficacy of six different methods of adjusting for severity of illness in diagnosis-related groups (DRG's) related to acute myocardial infarction. The purpose of this study is to determine the equity of the current DRG payments for patients suspected of having heart attacks. This is one of several studies designed to analyze the degree to which DRG's properly account for severity.

Status: This cooperative agreement was awarded in September 1985. The starting date of the project was January 1, 1986. Some preliminary planning was initiated during Fall 1985. Since that time, the full research team has been assembled, data collection forms have been designed, the medical records personnel have been trained, and data collection has begun. Data entry, editing, and analysis are scheduled for Summer 1987. The final report is expected by Fall 1987.

Diagnosis-Related Group Refinement and Diagnostic-Specific Comorbidities and Complications: A Synthesis of Current Approaches to Patient Classification

Project No.:	15-C-98930/1-01
Period:	August 1986 - July 1988
Funding:	$ 576,267
Award:	Cooperative Agreement
Awardee:	Yale University School of Organization and Management P.O. Box 1A New Haven, Conn. 06520
Project Officer:	Harry L. Savitt Division of Beneficiary Studies

Description: This project proposes to examine the effect of patient comorbidities and complications on hospital resource use. It will investigate whether the relationship between selected diagnoses and hospital utilization depends on the presence of other diagnoses. It also seeks to make recommendations to modify the current diagnosis-related groups using diagnostic-specific comorbidities and complications to define the more complex types of patients with high levels of utilization.

Status: This project is in the early developmental stage.

Severity of Illness and Diagnosis-Related Groups in Selected Cancers

Project No.:	15-C-98678/4-02
Period:	January 1985 - December 1987
Funding:	$ 214,010
Award:	Cooperative Agreement
Awardee:	University of Miami School of Medicine Comprehensive Cancer Center for the State of Florida P.O. Box 016960, D8-4 Miami, Fla. 33101
Project Officer:	John C. Langenbrunner Division of Reimbursement and Economic Studies

Description: This project utilizes existing data bases to evaluate the relationship between the intensity of disease and the cost of treating the disease for five common types of cancer—colon and rectum, lung, breast, cervix, and prostate. These five types of cancer represent more than 50 percent of new cancer cases. The project will utilize a staging algorithm developed by the American Joint Committee on Cancer as an adjunct to the current diagnosis-related group (DRG) system for the five types of cancer. New diagnosis categories will be developed that may explain a significantly greater proportion of the variation in resource consumption for treating the given types of cancer than the current DRG system.

Status: This study was awarded because of the Health Care Financing Administration's interest in DRG refinement issues, as well as its interest in policy development regarding hospitals that may attract more complex, sicker patients. The project will be composed of three phases during the next 3 years. During the first phase, criteria for case inclusion and data processing procedures have been finalized and the data set has been established. For the second phase, these data are being analyzed and a set of DRG's using updated patient information will be used to modify the categories. The last phase will involve the testing and validation of data from several hospitals in the Miami, Florida, area.

A Diagnosis-Related Group-Based Case-Mix Analysis of Oncology Care in Comprehensive Cancer Centers

Project No.: 15-C-98922/1-01
Period: August 1986 - July 1988
Funding: $ 460,000
Award: Cooperative Agreement
Contractor: Brandeis University
45 South Street
Waltham, Mass. 02254
Project Officer: John C. Langenbrunner
Division of Reimbursement and Economic Studies

Description: This project has three major goals:

- To examine inpatient discharges from comprehensive cancer centers.
- To compare them with the inpatient oncology case mix of teaching and community hospitals on five dimensions—diagnosis-related group (DRG) case mix, diagnostic case mix, distribution of resource cost within DRG's, extent of resource cost variance accounted for by DRG's, and ability of computerized staging to explain resource cost variation within DRG.
- To investigate and evaluate the utility of additional data elements for a limited number of oncological conditions which exhibit wide cost variations.

Analyses will include the use of large, national data bases (e.g., Medicare bill file) to compare patients characteristics and treatment settings. In addition, 2,000 Medicaid records will be individually abstracted to gather data on inpatient stays and related outpatient care before and after each stay. The data and analysis will help develop a refined case-mix classification system that builds in substitutions and efficiencies affected by the shift of oncology care to outpatient settings.

Status: The project is in the early developmental phase. The legislation establishing the Medicare prospective payment system (Public Law 98-21) authorized an exemption for certain certified comprehensive cancer centers under the National Cancer Institute. This research will aid users in understanding the case-mix difference among these centers and across all settings that treat cancer patients. The methodology will serve as an important step in developing capitated payment models.

Children's Hospital Case-Mix Classification System Project

Project No.: 95-C-98570/3-03
Period: July 1984 - December 1986
Funding: $ 395,000
Award: Cooperative Agreement
Awardee: National Association of Children's Hospitals and Related Institutions
325 First Street
Alexandria, Va. 22314
Project Officer: John C. Langenbrunner
Division of Reimbursement and Economic Studies

Description: This study has three objectives. The first objective is to evaluate the extent to which diagnosis-related groups (DRG's) define homogenous groupings of pediatric patients across different hospital settings, including children's hospitals. The second objective is to evaluate the extent to which other case-mix classification systems define homogenous groupings of pediatric patients across different hospital settings, including children's hospitals, and based on the strengths and weaknesses of the various systems, to develop a refined pediatric classification system. Alternative classification systems to be considered are disease staging, severity of illness, patient management categories, and pediatric diagnostic system—a system under initial development by five California children's hospitals. The third objective is to verify or modify the refined pediatric classification system based on detailed cost information and to evaluate the manner and extent to which the refined pediatric classification system can best be incorporated into prospective payment for pediatric discharges.

Status: This study was awarded because of the Health Care Financing Administration's interest in pediatric case-mix classification issues in the policy context of the new prospective payment system. Findings from the first phase of the study established that:

- Children's hospitals are similar in case-mix and resource intensity to university teaching hospitals with pediatric residencies.
- Children's hospitals and pediatric residencies treat a broader mix of pediatric conditions.
- Children's hospitals and residencies treat certain childhood conditions no more, and perhaps less, expensively than community hospitals.
- Children's hospitals and residencies treat virtually all of certain high-cost pediatric conditions, such as cardiac surgery.

The second phase developed a revised pediatric classification system—pediatric DRG's (PDRG's)—which redefined certain DRG's and split other DRG's, resulting in 73 additional groups; this revised classification system is applicable to pediatric hospital care delivered in children's, university, and community hospitals. The remaining analytic results of this study are scheduled for delivery at the end of the project period. The topic of including children's hospitals into the current DRG's will be part of the Report to Congress on the feasibility of paying hospitals currently excluded from the Medicare hospital DRG system on a prospective basis (mandated by Public Law 98-21).

Diagnostic Mix, Illness Severity, and Costs in Teaching and Nonteaching Hospitals

Project No.: 15-C-98835/1-02
Period: September 1985 - September 1987
Funding: $ 448,1391
Award: Cooperative Agreement
Awardee: University Hospital
Health Care Research Unit
75 East Newton Street
Boston, Mass. 02118
Project Officer: Joel Bobula
Division of Reimbursement and Economic Studies

Description: This project will investigate the relationship between case mix and costs in teaching and nonteaching hospitals. It will address two major questions with important policy implications:

- Are there significant, systematic differences between teaching and nonteaching hospitals in the complexity of diagnoses and severity of illness within diagnosis-related groups?

- Once one has controlled for diagnostic complexity and illness severity, how much cost differential remains between teaching and nonteaching hospitals?

The analyses will be based upon the results of 4,500 indepth chart reviews at 15 metropolitan Boston hospitals (five major teaching, five minor teaching, and five nonteaching institutions). The study will review cases in eight DRG clusters, representing common diagnoses in all 15 hospitals. Each DRG cluster has its own medical record abstraction form, designed by Boston University physicians and their clinical consultants. The forms incorporate the APACHE severity measurement tool as well as diagnosis-specific elements taken from the clinical and case-mix literature. Per-case costs will be obtained from each hospital's fiscal year 1985 case-mix and charge tapes submitted annually by legal mandate to the Commonwealth of Massachusetts Rate-Setting Commission.

Status: A final report is expected in September 1987.

Diagnosis-Related Groups and Nursing Resources

Project No.: 15-C-98500/1-02
Period: July 1984 - December 1986
Funding: $ 427,910
Award: Cooperative Agreement
Awardee: Yale University
School of Organization and Management
320 York Street
New Haven, Conn. 06520
Project Officer: Patricia Willis
Division of Reimbursement and Economic Studies

Description: This congressionally mandated study (Public Law 98-21) investigates the development of a diagnosis-related-group (DRG) specific nursing-intensity measure for application in the management, planning, and budgeting of hospital nursing resources. This measure will be related to commonly collected nurse staffing algorithms. It will be compatible with hospital cost-accounting systems so that it may be used to refine the contribution of nursing costs to the total costs of patient care. Also, it is intended that it should be empirically derived for each DRG, be clinically meaningful to nurses, and possess known statistical characteristics at the DRG level. Among hospital nursing-resource measures, the developers propose to examine the Grace-Reynolds Application and Study of Peto (GRASP) nursing-intensity measure by five Massachusetts Health Data Consortium hospitals and billed nursing charges at St. Luke's Hospital in Phoenix, Arizona. These data will be analyzed by DRG to develop statistics for the GRASP points and charges, "cost" the nursing services for each DRG at each site, and analyze the intragroup variance within DRG's. Additionally, the researchers will assess the extent to which nursing-resource measures capture differences in patient severity within DRG's.

Status: A draft report is expected in December 1986. Findings have been presented to the Health Care Financing Administration. A final report is expected early in 1987.

Capital

Medicare-Medicaid Payment Policies and Capital Formation

Project No.: 18-C-98267/1-02
Period: April 1983 - December 1985
Funding: $ 282,671
Award: Cooperative Agreement
Awardee: Center for Health Economics Research
75 Second Avenue
Needham, Mass. 02194
Project Officer: Joel Bobula
Division of Reimbursement and Economic Studies

Description: This report focused on hospital capital investment, with special emphasis on the effects of hospitals' dependence on Medicare and Medicaid as sources of hospital revenue and the effects of alternative payment and regulatory policies. The study used two sources for the analyses: Medicare cost report files for the period 1970-79; and the American Hospital Association Annual Survey for the period 1974-82. Some of the key findings of this study are as follows:

- Capital costs kept pace with the increase in overall hospital expenditures from 1971 through 1981.
- Proprietary hospitals spend a much higher proportion of total expenses on capital.
- Governmental hospitals are consistently the least expensive, both in terms of capital costs per day and capital costs as a proportion of total expense.
- Regional differences in cost per day, although significant, are a result of price-level differences among regions.
- Urban hospitals show greater capital intensity throughout the period, although rural hospitals show a higher rate of growth.
- Large inequalities in capital costs exist among hospitals, although some narrowing of capital cost occurred over the decade, not because high capital cost hospitals grew less rapidly, but rather because many hospitals with low capital costs began to incur significant debt.

Status: A final report was received in December 1985. Copies of the report are available through the National Technical Information Service, accession number PB86 - 233764.

Data Development and Analyses

Data for Hospital Cost Monitoring and Analysis of Hospital Costs

Project No.:	500-80-0066
Period:	September 1980 - December 1986
Funding:	$ 1,111,800
Award:	Contract
Contractor:	American Hospital Association 840 North Lake Shore Drive Chicago, Ill. 60611
Project Officer:	J. Michael Fitzmaurice Division of Reimbursement and Economic Studies

Description: This project obtains survey data from a set of hospitals that are surveyed monthly about their costs and activities. This serves as a prime source of outside data on the performance of hospitals and is used in Health Care Financing Administration (HCFA) analyses, research, and publications.

Status: To date, HCFA has received monthly "National Hospital Panel Survey Reports" and monthly "Community Hospital Statistics" through June 1986, which are available only from the American Hospital Association.

Skilled Nursing Facility Prospective Payment

Alternative Nursing Home Reimbursement Systems for Medicare

Project No.:	16-C-98274/3-01
Period:	January 1983 - March 1987
Funding:	$ 450,601
Award:	Cooperative Agreement
Awardee:	The Urban Institute 2100 M Street, NW. Washington, D.C. 20037
Project Officer:	Philip Cotterill Division of Reimbursement and Economic Studies

Description: This study is analyzing alternative approaches to prospective payment for Medicare skilled nursing facilities (SNF's) and investigating administrative factors that affect the efficiency of patient-related, rate-payment systems. The data used in this study were derived from 1980 Medicare cost reports and the Medicare/Medicaid automated certification system. The merging of these files produced a data base that included 3,492 of the 4,900 Medicare certified SNF's filing cost reports in 1980. These sample facilities accounted for roughly seven-eighths of all Medicare patient days provided that year. The data files are being updated with 1982 and 1983 data.

Status: This project provided much of the technical analysis contained in the "Study of the Skilled Nursing Facility Benefit Under Medicare," that was submitted to the Congress in January 1985. In addition, results from this project were published in an article and a working paper:

- "State rate-setting and its effects on the cost of nursing home care," Journal of Health Politics, Policy and Law, Vol. 9, No. 4, Winter 1985.

- "Cost and Case-Mix Differences in Hospital-Based and Freestanding Skilled Nursing Facilities," Working Paper, Urban Institute 3267-01, April 1984.

Analysis of the Medicare cost reports of skilled nursing facilities indicates that several proxy measures of case mix are important factors in explaining differences in SNF per diem costs. Higher costs are associated with a greater percentage of Medicare days, a higher number of admissions per bed, and greater nursing hours per inpatient day. These factors may indicate facilities with a greater orientation towards the short-term, rehabilitative Medicare patient. The factors only partially explain the higher costs observed for hospital-based, as opposed to freestanding SNF's. The project has been extended through March 1987 to assist the Health Care Financing Administration in analyzing options for SNF prospective payment under Medicare.

Resource Utilization Groups: Validation and Refinement of a Case-Mix System for Long-Term Care Reimbursement

Project No.:	18-C-98499/1-01
Period:	July 1984 - September 1986
Funding:	$ 248,924
Award:	Cooperative Agreement
Awardee:	Yale University School of Organization and Management New Haven, Conn. 06520
Project Officer:	Marni Hall Division of Reimbursement and Economic Studies

Description: This project continues Yale's prior work (also supported by the Health Care Financing Administration), which developed the resource utilization groups (RUG's) classification system for residents of long-term care facilities. This project refined the original RUG's and corrected deficiencies, e.g., the inclusion of some process variables, instead of just clinical variables, and reliance on subjective estimates of staff time. Unlike the prior project, it took into account the rate at which patients' conditions change.

Status: This project developed a revised five-group RUG's model. The model was validated using data from New York State and the National Center for Health Services Research. This study also developed and tested models for analysis of rate of change of case mix. The draft final report is expected in Fall 1986.

Case-Mix Measure for Long-Term Care Medicare Patients

Project No.: 18-C-98581/2-01
Period: July 1984 - September 1986
Funding: $ 253,199
Award: Cooperative Agreement
Awardee: Rensselaer Polytechnic Institute
School of Management
Troy, N.Y. 12181
Project Officer: Marni Hall
Division of Reimbursement and Economic Studies

Description: This project is a continuation of work begun under a Health Care Financing Administration-sponsored Yale University grant to develop resource utilization groups (RUG's) for long-term care patients. The RUG's contain individuals with similar resource consumption. The original set of RUG's was developed by using mostly Medicaid patients. This project developed RUG's for Medicare skilled nursing facility patients. The role of diagnostic variables and service/treatment variables as part of the classification system was evaluated. This project will also discuss the development of relative case-mix weights for each classification.

Status: Findings indicate that Medicare patients differ significantly from the Medicaid patients used in the original Yale study. A far more refined classification system, in some ways similar to that developed under the New York State RUG's demonstration project, was developed. A draft final report from this project is expected in Fall 1986.

Evaluability Assessment of the Medicare Prospective Payment System on Long-Term Care

Project No.: 100-84-0032
Period: October 1984 - January 1986
Funding: $ 129,891
Award: Contract
Contractor: Urban Institute
2100 M Street, NW.
Washington, D.C. 20037
Project Officer: Marni Hall
Division of Reimbursement and Economic Studies

Description: This project was funded by the Office of the Assistant Secretary for Planning and Evaluation. The role of the Office of Research and Demonstrations was to serve on a Departmental work group that provides ongoing technical direction and review of the work produced. The purpose of this study was to develop an evaluation strategy for investigating the impact of the Medicare prospective payment system (PPS) on the long-term care population and the long-term care system. The contractor was responsible for identifying potential patient, facility, and system-level changes that may result from the implementation of PPS. This study examined the extent and the manner in which the implementation of PPS has altered demand, utilization, and expenditures for long-term care services. The contractor also developed methodologies for examining the impact of those changes.

Status: The final report entitled "Evaluability Assessment of the Medicare Prospective Payment System on Long-Term Care," has been completed. It consists of three documents:

- A report that identifies a comprehensive list of evaluation issues and provides an overview of relevant literature including an annotated bibliography.
- A report that identifies, describes, and assesses data sets that can be used to address the evaluation issues.
- A report that presents a set of discrete research projects designed to fill the primary knowledge gaps about the impact of PPS on the post-discharge care provided to frail, functionally impaired elderly and individuals with underlying acute medical conditions.

Home Health

Home Health Agency Prospective Payment Demonstration

Project No.:	500-84-0021
Period:	December 1983 - December 1988
Funding:	$ 2,523,559
Award:	Contract
Contractor:	Abt Associates, Inc. 1055 Thomas Jefferson Street, NW. Washington, D.C. 20007
Project Officer:	William Saunders Division of Long-Term Care Experimentation

Description: The purpose of this project is to develop and test alternative methods of paying home health agencies on a prospective basis for services furnished under the Medicare and Medicaid programs. The demonstration will enable the Health Care Financing Administration to evaluate the effects of various methods of prospective payment on Medicare and Medicaid expenditures, quality of home health care, and home health agency operations.

Status: A contract was awarded in December 1983 to Abt Associates for development and implementation of the demonstration. The initial phase of the project involves the development of the specific payment methodologies; establishment of a research design and evaluation strategy; design of a process to monitor the quality of care provided under the demonstration; development of data collection and status reporting plans; and identification, selection, and training of participating home health agencies. The payment methodologies will then be tested for 3 years to determine the effects on Medicare and Medicaid expenditures, quality of care, and home health agency operations. The implementation of the demonstration has been delayed pending approval of waivers of the Medicare statutory and regulatory requirements necessary to conduct the demonstration.

Development of Home Health Agency Competitive Bidding Models

Project No.: 500-84-0033
Period: June 1984 - December 1986
Funding: $ 267,079
Award: Contract
Contractor: Center for Health Policy Studies, Inc.
5865 Robert Oliver Place
Columbia, Md. 21045
Project Officer: William Saunders
Division of Long-Term Care Experimentation

Description: This project is mandated by Section 6 of the Orphan Drug Act, Public Law 97-414. In the interest of testing purchasing and payment methods that would bring competitive market forces into the health care field, the Health Care Financing Administration has awarded a contract for the development of several models of competitive bidding for home health services under Medicare and Medicaid.

Status: A contract was awarded in June 1984 to the Center for Health Policy Studies to develop several alternative competitive bidding models. The contractor will also develop a research design and evaluation strategy for a possible subsequent demonstration project to test the bidding models. Two reports have been completed:

- "Review of the Literature and Experience of Competitive Bidding for Health Care Services," January 1985.
- "Market Study for Home Health Care Services," February 1985.

The project has been extended until December 1986 to provide additional time to complete three reports. These reports will provide a detailed description of the bidding models and the proposed demonstration project.

Hospice

National Hospice Study

Project No.:	99-P-97793/1-03
Period:	September 1980 - June 1984
Funding:	$ 2,890,840
Award:	Grant
Grantee:	Brown University Division of Biology and Medicine Box G Providence, R.I. 02912
Project Officer:	Spike Duzor Division of Long-Term Care and Experimentation

Description: This study evaluated the effects of providing hospice services to terminally ill Medicare patients. The Health Care Financing Administration conducted a major hospice demonstration/evaluation involving 26 sites during a 3 1/2-year period. Hospice sites provided traditional Medicare benefits and hospice-type services including outpatient drugs, home respite care, and continuous nursing care.

Status: The results of the study indicate that the hospice concept favorably compares with traditional Medicare services for quality-of-life outcomes. Hospices that had a comprehensive home care program were cost effective when compared with the traditional Medicare benefit. Generally, it was determined that hospice-type care can provide the necessary emotional, psychological, and medical support that would permit terminally ill patients to remain at home during their final months of illness and thereby eliminate long and costly periods of institutionalization. The final report is available through the National Technical Information Service, accession number PB86-226073/AS.

Hospice Patient Outcomes and Quality of Care

Project No.: 18-C-98615/01
Period: July 1984 - December 1985
Funding: $ 123,870
Award: Cooperative Agreement
Awardee: Hebrew Rehabilitation Center for Aged
Department of Social Gerontological Research
1200 Centre Street
Boston, Mass. 02131
Project Officer: Feather Ann Davis
Division of Beneficiary Studies

Description: The purpose of this research is to contribute to knowledge concerning variations in hospice patient quality-of-life measures according to type of hospice setting, type of services provided, and other relevant variables. The overall goal is to use two longitudinal data sets to extrapolate findings concerning the relationship between program and patient characteristics, and variations in pain and other symptoms experienced by hospice patients as death approaches. The data were collected as part of the National Hospice Study sponsored cooperatively by Health Care Financing Administration, Robert Wood Johnson Foundation, and the Hartford Foundation. The research consisted of two interrelated analyses: the primary one by Sylvia Sherwood and John Morris of Hebrew Rehabilitation Center for Aged and another conducted by Jeffrey Hiris and Vincent Mor of Brown University Program in Medicine under subcontract.

Status: The final report has been received and accepted. It will be made available through the National Technical Information Service. Two separate papers were submitted as part of the final report: "Hospice Organizational Characteristics and the Patient's Quality of Life Organizational-Level Analysis," by Jeffrey Hiris and Vincent Mor, and "Pain and Symptom Control of Hospice Patients," by Sylvia Sherwood, John Morris, and Matthew Archibald. The analyses revealed little overlap between variables that correlate significantly with the pain and the symptom control dependent variables, indicating that pain and symptoms represent very different phenomena which have different service implications. Specifically, it was found that patient involvement in own treatment and having a spouse as primary care provider were associated with less favorable pain control. The authors discuss the implications for training of families caring for patients at home.

Noncertified Hospice Cost Analysis

Project No.: 500-85-0038
Period: June 1985 - June 1987
Funding: $ 1,373,469
Award: Contract
Contractor: Jack Martin and Co.
30150 Telegraph Road, Suite 155
Birmingham, Mich. 48010
Project: Feather Ann Davis
Officer: Division of Beneficiary Studies

Description: This study is designed to collect fiscal year 1985-86 cost data from a stratified random sample of 100 hospices that are not participating in the Medicare hospice benefit, to serve as a control group for the evaluation of the Medicare hospice benefit legislation.

Status: Participation in the study is still being solicited, but 90 hospices of the target sample of 100 hospices are participating. Fiscal year 1985 data collection is under way.

Population-Based Study of Hospice

Project No.: 18-C-98674/0-02
Period: September 1984 - September 1987
Funding: $ 450,712
Award: Cooperative Agreement
Awardee: Fred Hutchinson Cancer Research Center
1124 Columbia Street
Seattle, Wash. 98104
Project Officer: Feather Ann Davis
Division of Beneficiary Studies

Description: This is a study of utilization among hospice and nonhospice terminal cancer patients; the effect of hospital prospective reimbursement on hospice case load and length of stay; and hospice penetration of the market. Seven data sets will be linked in order to provide both economy and power. The area under study is 13 counties in western Washington.

Status: The project was delayed about 6 months in start up because of delays in staff hiring and the processes of finalizing hospice participation. Data collection is under way.

Nature, Process, and Modes of Hospice Care Delivery

Project No.:	500-85-0022
Period:	April 1985 - April 1987
Funding:	$ 376,474
Award:	Contract
Contractor:	Joint Commission on Accreditation of Hospitals 875 North Michigan Avenue Chicago, Ill. 60611
Project Officer:	Feather Ann Davis Division of Beneficiary Studies

Description: This project is part of the Medicare benefit hospice evaluation. Surveys were conducted of a representative sample of both Medicare certified and noncertified hospices in order to describe and to understand what care is being provided, how it is being provided, and by whom. The emphasis is on the qualitative and quantitative description of variations in the nature, characteristics, and processes employed by hospices as measured by the Joint Commission on Accreditation of Hospitals' standards and associated requirements. It is the intent of this project to determine how representative Medicare-certified hospice providers are and the effects of certification on hospice care.

Status: The sample has been obtained and onsite surveys have been conducted. Clearance by the Office of Management and Budget for a mail survey was received. Data for both onsite and mail surveys have been received and are being analyzed. The final report is due in late Spring 1987.

Title XVIII Hospice Benefit Program Evaluation (Medicare)

Project No.: 500-85-0024
Period: April 1985 - March 1988
Funding: $ 1,295,156
Award: Contract
Contractor: Abt Associates, Inc.
55 Wheeler Street
Cambridge, Mass. 02138
Project Officer: Feather Ann Davis
Division of Beneficiary Studies

Description: This project addresses many of the questions raised by the Tax Equity and Fiscal Responsibility Act of 1982 (Public Law 97-248) and Deficit Reduction Act of 1984 (Public Law 98-369). The objectives of this evaluation are to determine "whether or not the reimbursement method and benefit structure...for hospice care under Title XVIII...are fair and equitable and promote the most efficient provision of hospice care...and make recommendations for legislative changes in the hospice care reimbursement or benefit structure." Specific information will be provided on the current prospective payment system for hospice. The evaluation will address congressional and departmental needs for information on the hospice benefit for making decisions regarding the possible modification of the benefit and the reimbursement mechanisms of the ongoing program operation. Reports will be prepared by February 1987 and February 1988.

Status: Analytic work is under way utilizing available Health Care Financing Administration 1984 and 1985 administrative data on hospice patients and a comparison group of Medicare cancer patients who died in 1984 and 1985.

Data Development and Analyses

Analysis of Physician Pricing Behavior, Third-Party Administrative Practices

Project No.: 600-76-0058
Period: April 1976 - September 1983
Funding: $ 741,570
Award: Contract
Contractor: Harvard University
School of Public Health
677 Huntington Avenue
Boston, Mass. 02115
Project Officer: William J. Sobaski
Division of Reimbursement and Economic Studies

Description: This study deals with physician responses to reimbursement alternatives, including analysis of price trends, relative values, and relations between medicine and private health insurance.

Status: All interim reports were completed. A draft final report was received in Fall 1984. The study of price trends showed that wide disparities both within and across areas may be concealed by national price trend figures. A unique methodological approach to relative value studies was undertaken that showed large imbalances exist between payments for technological procedures versus primary care. The nonprofit and for-profit private insurance sectors were shown to employ quite different strategies in establishing relationships with medicine, albeit both cover positive relationships. A new model of supply-and-demand factor interactions in the medical market was developed. The final report was completed in March 1986 and was submitted to the National Technical Information Service, accession number PB86-226925.

Survey of Physicians' Practice Costs and Income: Redesign and Implementation

Project No.: 500-83-0025
Period: June 1983 - January 1986
Funding: $ 1,654,380
Award: Contract
Contractor: National Opinion Research Center
1155 East 60th Street
Chicago, Ill. 60637
Project Officer: Sherry A. Terrell
Division of Reimbursement and Economic Studies

Description: The National Survey of Physicians' Practice Costs and Income (PPCIS) has been periodically conducted to provide data for the assessment and refinement of the Medicare Economic Index, which measures changes in general earnings levels and expenses incurred by physicians. The current survey (calendar year 1983-85) updates our knowledge of physicians' practice economics since the last such survey in 1978. Approximately 5,000 physicians responded to questions about costs and incomes, financial arrangements, hours worked, alternative forms of practice, service delivery, changes in physician-hospital relationships, participation in public programs, their perceptions of the impact of Medicare's prospective payment system on their practices, and sociodemographic characteristics of the patients they treat.

Status: The project has been completed. A final report, five papers, a public use data tape that includes the codebook, or a user's guide and codebook only are available from the National Technical Information Service:

- "Physicians' Practice Costs and Income Survey: U.S. CY 1983-85, Final Methodological Report," accession number PB86-204302/AS.
- "Physicians' Perceptions About the Short-Run Impact of Medicare's Prospective Payment Systems," accession number PB86-165172/AS.
- "An Analysis of Medicare's Physician Participation Agreement Program," accession number PB86-166121/AS.
- "Physician Involvement in Hospital Emergency Rooms and Outpatient Departments," accession number PB86-184850/AS.
- "Physician Participation in Alternative Health Plans," accession number PB86-243128/AS.
- "Report to Respondents Participating in the Physicians' Practice Costs and Income Survey," accession number PB87-109823.
- Physicians' Practice Costs and Income Survey: U.S. 1983-85, Public Use Data Tape (includes User's Guide and Codebook), accession number PB86-215027/AS.
- "Physicians' Practice Costs and Income Survey: U.S. 1983-85, User's Guide and Codebook," accession number PB86-215019/AS.

In addition, the Health Resources and Services Administration of the Public Health Service awarded Contract No. HRS-240-83-0057 to Health Economics Research, Inc. to conduct analyses of factors underlying physician productivity using the 1983 PPCIS data. One article, "A profile of emergency medical specialists, 1984-85: Demographic characteristics, practice patterns, and income" was published in Annals of Emergency Medicine, November 1986.

Further Analysis of the Medical Doctor Diagnosis-Related Groups Algorithms

Project No.:	500-85-0023
Period:	April 1985 - October 1986
Funding:	$ 293,242
Award:	Contract
Contractor:	Mandex, Inc. 8003 Forbes Place Springfield, Va. 22151
Project Officer:	Benson Dutton Division of Reimbursement and Economic Studies

Description: Section 603 of Public Law 98-21, the Social Security Amendments of 1983, required that the Department of Health and Human Services begin collecting data for calculating the cost of physician services related to inpatient care of beneficiary cases classified by diagnosis-related group (DRG) and report on the feasibility of a DRG-like system for Medicare payment for such physician services. This project is an extension of Contract Number 500-84-0024 with Mandex, Inc., which was completed in February 1985. The purpose of the earlier contract was to obtain statistical algorithms that could be used to improve estimates of the values of physician service resources for inpatient care by diagnosis-related groups calculated from the 1981 Health Care Financing Administration (HCFA) statistical files. In addition, suggestions were made for calculating these values from the 1983 HCFA statistical files and for examining the specialty and locality of using national average payment amounts. This contract has been further modified to allow the contractor to convert 1984 Part B Medicare Annual Data (BMAD) files of seven carriers from existing proprietary coding systems to the Health Care Financing Administration's (HCFA) common procedure coding system.

Status: The contractor has completed examinations of the distribution of Medicare allowed charges across procedures and physician practices simulations of fee schedules in one State, as well as comparisons of data from patient history files and the Part B Medicare annual data files maintained by HCFA. The final report is available from the National Technical Information Service, accession number PB86-246097/AS.

Payment Options for Nonphysician Anesthetists Under the Prospective Payment System

Project No.: 17-C-98759/1-01
Period: September 1985 - September 1987
Funding: $ 381,160
Award: Cooperative Agreement
Awardee: Center for Health Economics Research
75 Second Avenue, Suite 100
Needham, Mass. 02194
Project Officer: Cynthia K. Mason
Division of Hospital Experimentation

Description: This project is a 2-year econometric study of the provision of anesthesia services to surgical patients in hospitals. The primary purpose of the project is to assist the Health Care Financing Administration (HCFA) in the preparation of a congressionally mandated study (Section 2312(d) of the Omnibus Budget Reconciliation Act of 1984) of Medicare payment options that would not discourage the use of certified registered nurse anesthetists (CRNA's) by hospitals.

The study will address two broad questions:

- What are the technically and economically efficient uses of nonphysician anesthetists as substitutes for and complements to anesthesiologists in providing hospital anesthesia services?

- What are the direction and magnitude of any changes in the use of nonphysician anesthetists that could be expected under each possible prospective payment system payment option?

Status: The Center for Health Economics Research (CHER) is conducting the study using two basic approaches. In order to gather information on the range of CRNA activities and the types of cases in which CRNA's are involved, CHER's subcontractor, American Institutes for Research, is conducting a nationwide telephone survey of CRNA's and anesthesiologists. Following completion of the survey in late October 1986, the resulting data will be analyzed by CHER. In the interim, CHER is analyzing secondary data and reviewing available literature to assess anesthesia quality issues and provider practice patterns. CHER is expected to submit a draft report to HCFA in early 1987.

A National Study of Resource-Based Relative Value Scales for Physician Services

Project No.: 17-C-98795/1-02
Period: September 1985 - February 1988
Funding: $ 2,067,948
Award: Cooperative Agreement
Awardee: President and Fellows of Harvard College
Harvard School of Public Health
1350 Massachusetts Avenue, Holyoke Center 4th
Cambridge, Mass. 02138
Project Officer: Sherry A. Terrell
Division of Reimbursement and Economic Studies

Description: Harvard and its subcontractor, the American Medical Association, are conducting a comprehensive study of the relative value of physicians' services. The purpose is to develop objective and reliable information on the resource inputs for medical procedures performed by physicians. Over the 30-month period, the group will develop a resource-based relative value scale (RB-RVS) for approximately 200 procedures within and across medical and surgical specialties. The research methods include use of physician consensus groups and the Harvard method of calculating resources based on complexity of services, time, practice expense, and specialty training. A method for updating the relative values and fee structures is being developed. The project will satisfy the Consolidated Omnibus Budget Reconciliation Act of 1985 (Public Law 99-272, Section 9305) requirement that the Secretary of the Department of Health and Human Services develop a relative value scale (RVS) for physician services. The awardee will develop a method to determine what physician services are undervalued and overvalued under the current system of payment.

Status: The cooperative agreement was awarded in September 1985. The project enters its second year of activity in January 1987 and reports the following progress in the first 9 months of project startup:

- Twelve specialties were selected as the bases for indepth development of the RB-RVS. These specialties are general internal medicine, family medicine, general surgery, obstetrics and gynecology, orthopedic surgery, urologic surgery, ophthalmology, otolaryngology, thoracic/cardiovascular surgery, radiology, pathology, and anesthesiology.

- A small pilot study of indepth interviews, focusing on complexity issues, was completed to develop background papers.

- Background papers for about 30 specialty and subspecialty groups were prepared that describe physician work characteristics and complexity for the technical consulting group (TCG) meetings.

- Initial TCG meetings were completed by the end of July 1986.

- Four secondary data sets have been acquired including: the 1983-85 National Physicians' Practice Cost and Income Survey data; the Blue Cross/Blue Shield of Florida relative value scale; California relative value scale; and the Health Insurance Association of America surgical charge file. Preliminary analysis has begun on all four secondary data sources.

- Primary survey development work was completed, and field work is expected to begin in February 1987.

- Preliminary work has begun to identify appropriate extrapolation methodologies.

As the second phase of the project begins, tasks will focus on:

- Tabulating and analyzing survey and secondary data.

- Scheduling of additional TCG meetings to evaluate the survey and complexity measures.

- Determining the four component factor costs.

- Computing the RB-RVS for the surveyed specialties and procedures.

- Extending the RB-RVS to additional procedures.

Impact of Medicare Fee Freeze and Participation Agreements on Physicians

Project No.:	17-C-98758/1-02
Period:	September 1985 - August 1988
Funding:	$ 975,747
Award:	Cooperative Agreement
Awardee:	Center for Health Economics Research 75 Second Avenue, Suite 100 Needham, Mass. 02194
Project Officer:	Terrence L. Kay Division of Reimbursement and Economics Studies

Description: The project will undertake policy research on how physicians have responded to the Medicare physician fee freeze and participation agreement. Both of these provisions were established in the Deficit Reduction Act of 1984 (Public Law 98-369). The primary objective is to determine whether physicians increased the volume of services provided or the levels and mix of services during the period when their fees and Medicare reimbursements were frozen. The fee freeze study will use 100 percent of the history files of Part B claims from the States of Alabama, Connecticut, Washington, and Wisconsin for calendar years 1983-86. Econometric analyses of the participation agreement will be performed using data from the 1984 Physicians' Practice Costs and Income Survey. Special analyses of refinements in the way Medicare pays for physician services will be conducted.

Status: Claims data for 1983 and 1984 have been acquired and the construction of analytic files has begun for all four carriers. Data from 1984 for the States of Wisconsin and Alabama were used to complete an interim report for three potentially "over-priced" procedures: lens implants, coronary artery bypass grafts, and pacemaker implants. Initial econometric analyses of the physician's decision to sign the Medicare Physician Participation Agreement, using the 1984 Physicians' Practice Costs and Income Survey, have also been initiated. One report has been produced and is available from the National Technical Information Service: "What Should Medicare Pay for Surgical Procedures," accession number PB86-215605/AS.

Creating Diagnosis-Related-Group-Based Physician Reimbursement Schemes: A Conceptual and Empirical Analysis

Project No.: 15-C-98387-/1-02
Period: September 1983 - June 1987
Funding: $ 554,035
Award: Cooperative Agreement
Awardee: Center for Health Economics Research
75 Second Avenue, Suite 100
Needham, Mass. 02194
Project Officer: Terrence L. Kay
Division of Reimbursement and Economic Studies

Description: Under this project, conceptual analyses will explore alternative diagnosis-related-group-based physician payment schemes, using alternative packaging methods developed under an earlier Health Care Financing Administration contract. Empirical analyses will be conducted using Medicare Part A and Part B data for New Jersey, North Carolina, Michigan, and Washington.

Status: A first-year report on data from North Carolina and New Jersey has been delivered. An interim report on data from all four States has been received. One article has been published from this study: "Physician diagnosis-related groups," New England Journal of Medicine, Vol. 313, 1985. Ongoing work focuses on application of diagnosis-related groups to radiologists, anesthesiologists, and pathologists.

Economics of Diagnosis-Related-Group-Based Physician Reimbursement

Project No.: 18-C-98567/3-01
Period: July 1984 - October 1985
Funding: $ 154,966
Award: Cooperative Agreement
Awardee: Project Hope
Millwood, Va. 22646
Project Officer: Stephen F. Jencks
Division of Reimbursement and Economic Studies

Description: Project Hope will prepare a critical literary review and three papers on issues surrounding application of diagnosis-related groups to physician reimbursement, conduct a conference on Health Care Financing Administration-sponsored physician research, and conduct a small working conference on future research in this area.

Status: The final report is available from the National Technical Information Service, accession number PB87-103388/AS.

Enhancement, Validation, and Analysis of Central Office Statistical Files

Project No.: 500-86-0021
Period: August 1986 - May 1987
Funding: $ 498,298
Award: Contract
Contractor: Social and Scientific Systems Inc.
7101 Wisconsin Avenue, Suite 610
Bethesda, Md. 20814
Project Officer: Benson Dutton
Division of Reimbursement and Economic Studies

Description: The objective of this contract is to improve the quality and utility of the Health Care Financing Administration (HCFA) central/statistical files, especially those concerning physician services. The initial task of the contract is an orientation conference consisting of 1-day sessions for carrier staff technicians, HCFA regional office personnel, and central office staff. The purpose of the conference is to review the objectives and instructions for preparing the calendar year 1985 Part B Medicare annual data (BMAD) files. Further tasks include beneficiary and provider file enhancements and calendar year 1984 BMAD file validation and cleansing. Finally, the contractor will be asked to conduct special statistical tasks on an as-needed basis.

Status: Preparations for and organization of the orientation conference are under way. Selection of the dates and location of the conference have been completed. Names of HCFA central office, regional office, and Medicare carrier personnel who will be attending the orientation conference have been submitted to the contractor. The appropriate carrier personnel have been identified and contacted regarding the beneficiary and provider file enhancement tasks. The BMAD file validation and cleansing task began in August 1986. Work on the special statistical tasks has commenced.

Prospective Payment of Physicians

Funding: Intramural
Project Director: Stephen F. Jencks
Division of Reimbursement and Economic Studies

Description: Section 603 of Public Law 98-21, Social Security Amendments of 1983, required that the Secretary, Department of Health and Human Services, during fiscal year 1984, begin the collection of data necessary to compute, by diagnosis-related groups (DRG's), the amount of physician charges for services furnished to hospital inpatients classified in those DRG's. A Report to Congress that includes recommendations on the advisability and feasibility of determining payment for inpatient physicians' services on a DRG-type classification was required for 1985.

Status: Intramural and extramural work is essentially complete. A Report to Congress was prepared by the Office of Research and Demonstrations and is currently undergoing departmental review. Final reports were received in 1986 from the Center for Health Economics Research and Project Hope. An article summarizing alternatives for physician payment by Medicare, "Strategies for reforming Medicare's physician payments," was published in New England Journal of Medicine, Vol. 312, 1985.

Malpractice Component of the Medicare Economic Index

Funding: Intramural
Project Director: Benson Dutton
Division of Reimbursement and Economic Studies

Description: Each year, the Health Care Financing Administration (HCFA) publishes the Medicare Economic Index (MEI) (congressionally mandated by Public Law 92-603) for use in limiting growth in prevailing charges for physician services. MEI is developed by HCFA's Office of the Actuary mainly from selected components of the Consumers Price Index or the Producers Price Index, plus a malpractice component. HCFA's Office of Research and Demonstrations develops the data to calculate the malpractice component. Supplementary data for calculating the malpractice component of the Medicare Economic Index are obtained annually from major medical malpractice insurers. The medical malpractice component is an estimate of the annual changes in medical malpractice insurance premiums charged for a specific level of coverage.

Status: The requisite data have been obtained so that results could be provided to HCFA's Office of the Actuary. Announcement of the MEI will be made in the Federal Register, for fee-screen year 1987 (October 1, 1986 to September 30, 1987).

Assignment Rates Revisited

Funding: Intramural
Project Director: Alma McMillan
Division of Beneficiary Studies

Description: The level of the assignment rate for physicians' services is of continuing interest. Beneficiaries are affected financially when the physician elects not to accept payment for services on an assigned basis. Data on physician assignment rates through 1978 have been published earlier. This study looks at the overall trend in assignment rates through 1985 and compares changes in assignment rates for 1975 and 1982, by age, sex, race, and State. Assignment rates by physician specialty are also analyzed, as well as the effect of assignment of charges for Medicare enrollees also covered under Medicaid.

Status: The study shows that substantial increases in the assignment rate have coincided with the implementation of provisions in the Deficit Reduction Act of 1984 to encourage assignment, and the assignment rate reached an all-time high of 69 percent in 1985. The study also shows that, in 1982, about 52 percent of the $17.6 billion in physicians' charges to aged Medicare beneficiaries was assigned and about 70 percent of the $2.2 billion in charges to disabled beneficiaries was assigned. These figures represent an increase from the rate of 47 percent for the aged in 1975 and an increase from the rate of 64 percent for the disabled in 1976. The exclusion of charges for Medicaid eligibles reduces the assignment rate several percentage points. For aged enrollees, the rate dropped 6 percentage points to 46 percent. The effect of unassigned claims on beneficiary liability was also examined. Inflation-adjusted liability per aged user increased 64 percent from 1975 to 1982 (from $42 to $69). The most important factor behind this increase was the 61-percent increase in inflation-adjusted physician charges during this period. One-fourth of aged users had a liability of $100 or more in 1982, and more than one-fifth of disabled users had that much liability. An article on this study, "Trends in physician assignment rates for Medicare services, 1968-85," was published in the Winter 1985 issue of the Health Care Financing Review.

Other Physician Payment

Physician Reimbursement and Continuing Care Under Medicaid in Suffolk County, New York

Project No.:	11-C-98052/2
Period:	September 1981 - December 1986
Funding:	$ 932,727
Award:	Cooperative Agreement
Awardee:	New York Department of Social Services Division of Medical Assistance 40 North Pearl Street Albany, N.Y. 12243
Project Officer:	John Meitl Division of Health Systems and Special Studies

Description: This demonstration is designed to test the impact of alternative methods of physician reimbursement on the provision of continuing care for Medicaid children in Suffolk County, N.Y. The methods include the current fee schedule, a fee-for-service/continuing care method that reimburses physicians at a higher rate for accepting continuing comprehensive care, and a comprehensive prepayment plan.

Status: Major milestones included development of capitation rates and an augmented fee schedule; development of claim payment, data collection, and management reporting systems; and enrollment of physicians and recipients. Active enrollment of children and physicians ended May 1, 1984. A total of 3,900 children and 77 physicians participated in the demonstration. The project was phased out during the first half of 1986, and the evaluation is expected to be completed in December 1986.

Impact of Physician Supply and Regulation on Physician Fees and Utilization of Services

Project No.: 18-P-97619/5
Period: March 1980 - December 1985
Funding: $ 408,287
Award: Grant
Grantee: Blue Cross/Blue Shield of Michigan
20800 Greenfield
Oak Park, Mich. 48237
Project Officer: Benson Dutton
Division of Reimbursement and Economic Studies

Description: Blue Cross and Blue Shield of Michigan (BCBSM) has used paid claims files to examine the issue of physician-induced demand. BCBSM has also examined market areas in Michigan with private and Medicare-paid claims from 1975 to 1980. In addition, the study is investigating the impact of physician supply and regulation on the price and quantity of physician services. To supplement the paid-claims data, BCBSM has surveyed a sample of Michigan physicians to determine amenities, workload/hours, non-Blue Shield volume, and charges. This project will describe and analyze variation in per capita use across market areas. BCBSM is using patient illness diagnostic tracers from physician billing data. The inducement hypothesis is to be tested using a "Reinhardt test" of physicians' fees while holding relevant supply, demand, and amenities variables constant.

Status: The study identified 15 market areas in Michigan and showed that there were major differences between market areas in use rates as well as the growth in those rates. The areas with the highest use rates in 1975 were also the markets with the highest growth in use. On induced demand, the data support the hypothesis that an increase in the availability of doctors increases the use of services, but the evidence refutes the target-income hypothesis by showing that fees move toward competitive levels. BCBSM interim reports were very useful in resolving the clinic locality issue in Michigan raised by Congressman Robert Davis (R-MI) in 1982. Other reports received include:

- "Medicare Assignment Rates in Michigan."
- "The Effects of Physician Availability on Fees and the Demand for Doctors' Services."
- "Survey of Michigan Physicians' Practice Characteristics."
- "Medicare Fees, Use, and Assignment Rates in Michigan's Physician Service Markets."
- "Fees or Use? What's Responsible for Rising Health Care Costs?"
- "The Determination of Medicare Market Areas and Medicare Fees, and Use in Michigan."

The final report is available from the National Technical Information Service, accession number PB86-166501/AS.

A Demonstration and Evaluation of Direct Physician Capitation Under the Medicare Program

Project No.: 95-C-98919/3-01
Period: August 1986 - October 1989
Funding: $ 2,457,601
Award: Cooperative Agreement
Awardee: Mathematica Policy Research, Inc.
600 Maryland Avenue, SW.
Washington, D.C. 20024
Project Officer: Spike Duzor
Division of Health Systems and Special Studies

Description: Mathematica Policy Research (MPR) and its subcontractor Medical Group Management Association will design a demonstration and develop an implementation and evaluation plan of direct capitation to medical groups. This cooperative agreement will span 51 months from time of award until completion of the evaluation. Up to 20 geographically representative medical group practices will be recruited to participate in the demonstration. Each medical group will enroll up to 1,000 Medicare beneficiaries into the capitated demonstration. One reimbursement model that will be considered is for the medical group to receive 95 percent of the adjusted average per capita cost for both Part A and B benefits, with the medical group and the Health Care Financing Administration sharing in any surplus in a Part A service fund. The critical questions to be addressed through this demonstration include:

- Is direct capitation to medical groups feasible?
- Can and will medical groups assume financial risk?
- What is the impact of the demonstration on use and cost of services by Medicare beneficiaries?

Status: MPR received a 1-year planning cooperative agreement to design a demonstration to test direct physician capitation. This design will describe capitation methodology, with a complete analysis of any stop-loss and reinsurance provision, site selection criteria, and sample size for medical groups and patients.

Community-Based Care

Demonstration of Community-Wide, Alternative Long-Term Care Model

Project No.:	11-P-90130/2-10
Period:	July 1976 - July 1986
Funding:	$ 960,938
Award:	Grant
Grantee:	New York State Department of Social Services 40 North Pearl Street Albany, N.Y. 12243
Project Officer:	William Saunders Division of Long-Term Care Experimentation

Description: The New York State Department of Social Services demonstrated alternative approaches to delivering and financing long-term care to the adult disabled and elderly Medicaid population of Monroe County, New York. The project developed the Assessment for Community Care Services (ACCESS) model as a centralized unit responsible for all aspects of long-term care for Monroe County residents 18 years of age or over who are eligible for Medicaid and have long-term health care needs. ACCESS staff provided each client with comprehensive needs-assessment and case-management services.

Status: The project received waivers to permit provision of certain community long-term care services not normally provided under Medicaid in New York. After the project became operational in 1977, more than 23,000 people with potential long-term care needs received assessments under this program. The demonstration began phase down in January 1986 and was completed in July 1986.

Continued Demonstration of a Long-Term Care Center Through Inclusion and Expansion of Title XVIII

Project No.:	95-C-97254/2-05
Period:	August 1980 - September 1986
Funding:	$ 2,678,395
Award:	Cooperative Agreement
Awardee:	Monroe County Long-Term Care Program, Inc. 55 Troup Street Rochester, N.Y. 14608
Project Officer:	William Saunders Division of Long-Term Care Experimentation

Description: The purpose of this demonstration is to expand the alternative long-term care delivery model, Assessment for Community Care Services (ACCESS), developed for the Medicaid population in Monroe County, New York, to include the county's Medicare population. The addition of this Medicare project is for the purpose of working toward an integration of Medicare and Medicaid long-term care services.

Status: The project began operations in October 1982. The Health Care Financing Administration (HCFA) has contracted with New York Blue Cross to serve as Medicare fiscal intermediary for the demonstration. Thus far, more than 10,000 Medicare beneficiaries with potential long-term care needs have received assessments from the project. The project began phase down in January 1986 and completed its operational phase in May 1986. The final report for the project is currently being written.

Modifications of the Texas System of Care for the Elderly: Alternatives to the Institutionalized Aged

Project No.: 11-P-97473/6-07
Period: January 1980 - December 1988
Award: Grant
Grantee: Texas Department of Human Resources
701 West 51st Street
P.O. Box 2960
Austin, Tex. 78769
Project Officer: Michael J. Baier
Division of Long-Term Care Experimentation

Description: The purpose of this project is to reduce the growth of nursing homes in Texas and, at the same time, expand access to community care services for needy Medicaid individuals. It is being accomplished by directly changing the operating policies of the State's Title XIX and XX programs; in particular, by eliminating the State's lowest level of institutional care--intermediate care facility (ICF) II. Existing organizations responsible for the State's Title XIX and XX programs are responsible for project implementation.

Status: This project was scheduled to terminate on December 31, 1985, but was extended by Federal legislation for 3 years. In March 1980, there were 15,486 individuals in the ICF-II group. As of July 1985, there were 2,614 clients remaining. From March 1980 to July 1985, the total institutional population also decreased from 64,864 to 54,726 clients, while the community care population increased approximately 40 percent.

Systematic Examination of Factors That Promote Home Care by the Family

Project No.: 18-C-98385/5-03
Period: September 1983 - December 1986
Funding: $ 401,529
Award: Cooperative Agreement
Awardee: Abbott Northwestern Hospital, Inc.
Planning and Marketing Department
800 East 28th Street at Chicago Avenue
Minneapolis, Minn. 55407
Project Officer: Marni Hall
Division of Reimbursement and Economic Studies

Description: The primary purpose of this project is to describe the role of urban and rural family members in providing home care to frail and chronically ill relatives. It will assess the impact that formal support systems, such as health and social services, have on the promotion of home care. Detailed data were collected on the caregiving experiences of families of persons meeting the study criteria of advanced age, impairment, living in a private home, and family contacts. Included in this study was a sample of 150 hospital patients who were discharged to nursing homes (and their caregivers).

Status: All data for this study have been collected. In addition to data obtained from the respondents, data on Medicare utilization and costs were obtained from HCFA's Medicare Automated Data Retrieval System (MADRS). Data analysis is under way. A draft final report is expected in Fall 1986.

Assess (State) Tax Incentives as a Means of Strengthening the Informal Support System for the Elderly

Project No.:	99-C-98410/9-03
Period:	September 1983 - September 1986
Funding:	$ 387,454
Award:	Cooperative Agreement
Awardee:	Center for Health and Social Services Research 155 South El Molino Pasadena, Calif. 91101
Project Officer:	Sherry A. Terrell Division of Reimbursement and Economic Studies

Description: The purpose of this project was to study selected State (Arizona, Idaho, Iowa, and Oregon) tax incentives that were believed to stimulate the informal caregiver system and reduce either current or anticipated demands on the formal long-term care system. Specific objectives were:

- To describe and analyze tax incentives that have been implemented in selected States.
- To develop a predictive model to identify those persons in the general elderly population and their informal caregivers who are likely to take advantage of tax incentives.
- To determine the potential impact of the tax incentive programs in preventing or delaying institutionalization.

Status: The project ended in September 1986. A final report is expected early 1987. Favorable study circumstances were found in Idaho for indepth primary data collection where, in 1982, more than 700 individuals claimed deductions or credits. Study circumstances in Arizona were less favorable, where only 75 claimants could be identified, and although the Iowa and Oregon programs were not suitable for indepth study, the two tax program structures are extensively described.

Respite Care Co-Op for Impaired Elderly

Project No.: 18-C-98398/5-03
Period: September 1983 - December 1986
Funding: $ 128,880
Award: Cooperative Agreement
Awardee: Southcentral Michigan Commission on Aging
8135 Cox's Drive, Suite 1-C
Portage, Mich. 49002
Project Officer: Jean L. Bainter
Division of Long-Term Care Experimentation

Description: This study has developed a model cooperative to provide respite for family caregivers of impaired elderly. Family members pay for care received with care given. The objectives are to study the feasibility and cost of establishing a model cooperative designed to prevent exhaustion of family members, to eliminate the need for more intensive and/or expensive care, and to prevent unnecessary institutionalization of the elderly.

Status: The policy and procedure manuals were developed by an advisory group composed of future caregivers, the program coordinator, and consultants with previous experience in a similar setting. Issues such as caregiver training, care receiver characteristics (such as mobility, orientation/disorientation, etc.), legal implications of providing care, and insurance coverage were investigated. One co-op has been established in Kalamazoo with 10 families participating. A second co-op is being established in Battle Creek, and the Lansing Red Cross is exploring the feasibility of establishing the third. Four major workshops have been held to interest other agencies in developing co-ops. A constant informative media campaign attempts to reach those who would be appropriate members. An outside evaluation is addressing issues relating to the development and implementation of this model, as well as those regarding its outcomes.

On Lok's Risk-Based Community Care Organization for Dependent Adults

Project Nos.:	95-P-98246/9-03 11-P-98334/9-03
Period:	November 1983 - Indefinitely
Award:	Grant
Grantees:	On Lok Senior Health Services 1441 Powell Street San Francisco, Calif. 94133 and California Department of Health Services 714-744 P Street Sacramento, Calif. 95814
Project Officer:	Jean L. Bainter Division of Long-Term Care Experimentation

Description: In response to the congressional mandate of Section 603(c)(1) and (2) of Public Law 98-21, the Social Security Amendments of 1983, the Health Care Financing Administration granted Medicare waivers to the On Lok Senior Health Services and Medicaid waivers to the California Department of Health Services. Together these waivers permit On Lok to implement an at-risk, capitated payment demonstration in which more than 300 frail elderly persons, certified by the Department of Health Services for institutionalization in a skilled nursing facility, are provided a comprehensive array of health and health-related services in the community. The current demonstration maintains On Lok's comprehensive community-based program but has modified its financial base and reimbursement mechanism. All services are paid for by a predetermined capitated rate from both Medicare and Medicaid (Medi-Cal). The Medicare rate is based on the adjusted average per capita cost for Medicare's institutionalized population. The Medi-Cal rate is based on the State's computation of current costs for similar Medi-Cal recipients. Individual participants may be required to pay copayments, spend down income, or divest assets, based on their financial status and eligibility for either or both of the programs. On Lok has accepted total risk beyond the capitated rates of both Medicare and Medi-Cal with the exception of the Medicare payment for end stage renal disease. The demonstration provides service funding only under the waivers. The research and development activities are being funded through private foundations. The studies being conducted include: an assessment of the effects of the copayment system; an examination of the impact of the assumption of financial risk on mortality rates and health status of the participants; an evaluation of the probabilities of movements (community, hospital, nursing home, disenrollment, and death) relating to patients' health conditions and outpatient service utilization; and an evaluation of the effectiveness of the demonstration through a comparison study.

Status: Section 9220 of the Consolidated Omnibus Budget Reconciliation Act of 1985 has extended the On Lok demonstration indefinitely, subject to the terms and conditions in effect as of July 1, 1985, except that requirements relating to data collection and evaluation will not apply.

Incentive Reimbursement Plan for Medicaid Home Health Services

Project No.: 11-C-98549/1-01
Period: December 1984 - February 1986
Funding: $ 162,452
Award: Cooperative Agreement
Awardee: State of Connecticut
Department of Income Maintenance
110 Bartholomew Avenue
Hartford, Conn. 06106
Project Officer: Michael J. Baier
Division of Long-Term Care Experimentation

Description: This 2-year project proposed to reward Medicaid clients for using lower cost home health agency services through the payment of rebates. The overall purpose was to test whether the granting of rebates would result in more cost-effective use of home health services. The project was scheduled to include 1,200 Medicaid clients in Hartford, Connecticut, who were in need of home health care.

Status: The project was awarded in November 1984 for the first of 2 project years. However, in February 1986, the project was terminated at the request of the State of Connecticut because of a number of operational problems it had encountered.

Evaluation of Coordinated Community-Oriented, Long-Term Care Demonstration

Project No.: 500-80-0073
Period: September 1980 - December 1986
Funding: $ 2,913,823
Award: Contract
Contractor: Berkeley Planning Associates
3200 Adeline Street
Berkeley, Calif. 94703
Project Officer: Kathy Ellingson
Division of Long-Term Care Experimentation

Description: This long-term care project evaluates a series of demonstration projects that tested the delivery of coordinated community care services. Specifically, the demonstrations tested whether care tailored to clients' needs could keep them in the community instead of moving them into expensive institutional care settings.

Status: The contractor completed case studies for the participating projects that highlight the history and origin of the project, describe project organization, and discuss operational issues. A final report focusing on client outcomes and cost-effectiveness issues was released in early 1986. In general, the results indicate that the projects that were more successful in achieving reductions in long-term care expenditures were those that controlled access to institutional services (preadmission screening) and those that consolidated all services into a single agency. Projects designed to upgrade the traditional home care package were less successful in reducing long-term care expenditures, as few differences in impact and cost between traditional care and these projects were found. One of the projects under review by Berkeley Planning Associates, the Assessment for Community Care Services (ACCESS) Medicare program, did not become operational until November 1982 and served clients until July 1986. This evaluation is in progress. Results from the ACCESS Medicare evaluation will be available in late 1986.

Report to Congress: Identifying Individuals At Risk of Institutionalization

Project No.:	HHS-100-85-0171
Period:	September 1985 - October 1986
Funding:	$ 227,316
Award:	Contract
Awardee:	Mathematica Policy Research, Inc. P.O. Box 2393 Princeton, N.J. 08543-2393
Project Officer:	Leslie N. Saber Division of Long-Term Care Experimentation

Description: The evaluation of the National Long-Term Care Channeling Demonstration produced an extensive data base including client and informal support characteristics and cost and utilization information on the 6,341 participants. Further analysis of the data has been undertaken by Mathematica Policy Research, Inc., to identify clients who are at risk of institutionalization who could be treated more cost effectively with community-based services. This study is mandated by The Orphan Drug Act (Public Law 97-414), passed by Congress in 1983. In addition to the channeling data, Mathematica is reviewing the findings of other studies to examine predictors of institutionalization.

Status: Five technical reports have been completed and submitted to the Health Care Financing Administration (HCFA) and the Assistant Secretary for Planning and Evaluation for review and comment. A final report was received in November 1986 and is being reviewed by HCFA staff.

Deinstitutionalization of the Chronically Mentally Ill

Project Officer: Jean L. Bainter
Division of Long-Term Care Experimentation

Description: This project was initiated as a joint effort between the Departments of Housing and Urban Development (HUD) and Health and Human Services under the Demonstration for Deinstitutionalization of the Chronically Mentally Ill. HUD provided loans for the construction of community-based housing under Section 202, and rental assistance under Section 8. The Health Care Financing Administration is providing Medicaid waivers to permit reimbursement for a 3-year period for services such as case management, life skills training, supervision, and transportation. The 3-year period is considered a transition period during which the State secures permanent funding. The demonstration design requires that clients be at least 18 years old, chronically mentally ill, and either institutionalized or at risk of being institutionalized. It also stipulates that each client be assigned a case manager who would perform many diverse functions such as providing linkage to needed services and monitoring of the client's functional status. An integral task for the case manager is formulation, assistance in implementation, and periodic revision of an individual service plan tailored to each client's unique needs. In order to encourage the development of a variety of housing and supportive service models, a range of required and recommended services to be offered to residents of demonstration housing was specified. In addition to case management, required services include: house and milieu management, life-skill development, mental and physical health care, and crisis stabilization. Recommended or optional services as required to fulfill the client's total needs include: vocational development, sheltered workshops, education, psychotherapy, advocacy services, and recreational/vocational planning. Two types of independent living residences have been developed: group homes to serve a maximum of 12 individuals each or independent living complexes, i.e., apartments of 6 to 10 units, to house no more than 20 individuals.

Status: Medicaid waivers were approved in 12 States. The eight States listed below continue to provide services under waivers.

A Model Addressing the Residential Needs of the Chronically Mentally Ill

Project No.: 11-P-98117/6-05
Period: July 1982 - May 1987
Award: Grant
Grantee: Arkansas Department of Human Services
Seventh and Main Streets
Little Rock, Ark. 72201

Effective and Efficient Community Support Services for the Chronically Mentally Ill

Project No.: 11-P-98000/3-05
Period: September 1981 - December 1986
Award: Grant
Grantee: Office of Health Care Financing
1331 H Street NW., Fifth Floor
Washington, D.C. 20005

Cost-Effective Community Alternatives to Institutionalization of the Chronically Mentally Ill

Project No.: 11-P-97575/4-05
Period: April 1981 - March 1986
Award: Grant
Grantee: Georgia Department of Medical Assistance
Suite 1266, West Tower
2 Martin Luther King Drive
Atlanta, Ga. 30334

Cost-Effective Comprehensive Community Residential Treatment of the Chronically Mentally Ill

Project No.: 11-P-98242/1-04
Period: November 1982 - May 1987
Award: Grant
Grantee: Maine Department of Human Services
221 State Street
Augusta, Maine 04333

Cost-Effective Community Alternatives to Deinstitutionalization of the Chronically Mentally Ill

Project No.: 11-P-98100/1-04
Period: November 1982 - June 1987
Award: Grant
Grantee: New Hampshire Division of Welfare
Hazen Drive
Concord, N.H. 03301

Services in Housing and Urban Development Transitional Housing for Chronically Mentally Ill

Project No.: 11-P-97799/2-04
Period: August 1982 - July 1986
Award: Grant
Grantee: New Jersey Department of Human Services
Division of Medical Assistance
Quakerbridge Plaza
Trenton, N.J. 08625

Deinstitutionalization of the Chronically Mentally Disabled, Cost-Effective Community Alternatives

Project No.: 11-P-98118/1-05
Period: June 1982 - May 1987
Award: Grant
Grantee: Department of Social and Rehabilitative Services
600 New London Avenue
Cranston, R.I. 02920

Cost-Effective Community Residential Treatment for the Mentally Ill

Project No.: 11-P-97787/1-05
Period: August 1981 - November 1986
Award: Grant
Grantee: Vermont Agency of Human Services
Department of Social Welfare
103 South Main Street
Waterbury, Vt. 05676

Highline Independent Apartment Living Project

Project No.: 11-P-98200/0-04
Period: April 1982 - April 1986
Award: Grant
Grantee: Department of Social and Health Services
Division of Medical Assistance, LK-11
Olympia, Wash. 98504

Quality

Improving New York State's Nursing Home Quality Assurance Program

Project No.:	11-P-97590/2-05
Period:	September 1980 - December 1986
Award:	Grant
Grantee:	State of New York Department of Social Services Tower Building Empire State Plaza Albany, N.Y. 12237
Project Officer:	Elizabeth S. Cornelius Division of Long-Term Care Experimentation

Description: This project tests the simplification of federally mandated periodic medical review/independent professional review processes in nursing homes and combines the process with the annual facility survey. Surveyors use 11 sentinel health events, such as accidents, decubitus ulcers, and medication regimen to determine if nursing home patients are receiving quality care. Facilities found to have fewer than the average problems in these areas receive a less than full facility survey. This combined medical review and survey method reduces surveyors' time and allows State personnel to focus on facilities and patients with major problems.

Status: The project is currently in its fifth and final year. The new inspection of care processes are fully operational. The State indicates that the new system provides documentation to allow them to take positive corrective actions against nursing homes found to be in noncompliance. In the past year, 23 facilities have had adverse actions taken by the State and only two have resulted in administrative hearings. The independent evaluator submitted a final report in the Fall of 1985. The substantive findings regarding this project were:

- The average severity of deficiencies was higher under the new method than under the old method.
- Most of the deficiencies found by the evaluator's validation team were also found by the State surveyors. However, with respect to correction, the State surveyors reported almost all cited deficiencies corrected at followup, while the validation team found two-thirds of the cited violations were corrected.
- There was a significant relationship between the number of deficiencies detected by State surveyors and an independent, nondeficiency-based quality-of-care measure, the Quality Assessment Index (QAI). The relationship between the severity of deficiencies detected by State surveyors and QAI score was somewhat greater than that for quantity of deficiencies.
- The results suggest that there was a decline in total surveyor time spent on nursing home quality assurance.

The State has conducted an evaluation of the last 2 years of the project. The final report will be submitted in Spring 1987.

Quality Assurance Sampling: A Statistical Quality-Control Approach to Inspection of Care

Project No:	11-C-98260/1-03
Period:	February 1983 - May 1986
Funding:	$ 15,600
Award:	Cooperative Agreement
Awardee:	Massachusetts Department of Public Welfare 600 Washington Street Boston, Mass. 02111
Project Officer:	Elizabeth S. Cornelius Division of Long-Term Care Experimentation

Description: The main objective of the project is to verify that patients in nursing homes are receiving appropriate care at the appropriate level, without reviewing every patient. Current law requires a review of all Medicaid patients in a facility to verify the appropriateness of care and placement. This project will use statistical quality control techniques to achieve these goals so that surveyor time can be reallocated to other quality-assurance activities.

Status: Criteria have been developed for determining which facilities are appropriate for the sampling process. The procedures for sampling patients, including safeguards to control statistical biases, have been refined. Pretests of the process and orientation sessions for surveyors were conducted in July and August 1983. The project became operational on August 29, 1983. During the first quarter, more than 50 percent of the facilities received a 100-percent review based on the walk-through findings. During the last quarter of the first year and the first two quarters of the second year, only 25 percent of facilities have received a full review. During the second and third years, the State systematized the process and it functioned normally. In the third year, the State developed the evaluation plan and a revised process that would be used when the waivers were withdrawn. The State contracted with the Social Gerontology Department of the Hebrew Rehabilitation Center for the Aged to conduct the evaluation. The final report of the evaluation has been submitted to the State. The State returned to full review of Medicaid residents in May 1986 using the revised process approved by the Boston Regional Office. The final report including the evaluation will be available in Spring 1987.

A Longitudinal Study of Case-Mix Outcomes and Resource Use in Nursing Homes

Project No.: 18-P-98717/1-01
Period: September 1985 - August 1988
Funding: $ 722,135
Award: Grant
Grantee: Brown University
Box G
Providence, R.I. 02912
Project Officer: Elizabeth S. Cornelius
Division of Long-Term Care Experimentation

Description: This study of natural histories of patient outcomes for subgroups of nursing home residents is a 3-year research project that will parallel the development of case-mix reimbursement. The objectives are:

- To create a typology that classifies residents into subgroups based on characteristics at admission.
- To measure patterns of outcomes for subgroups and formulate appropriate use patterns for case-mix categories that are based on outcomes patterns.
- To provide a quality-of-care link between case mix and costs.
- To develop a basis for an outcome-oriented quality control system compatible with many reimbursement systems.

Two large files of longitudinal data on skilled nursing facility and intermediate care facility residents will be used. One data base has resident data from facilities in 11 States, the other one includes 350 facilities in 37 States. In addition, three crosscutting files with staff time information as well as resident characteristics, and two longitudinal files covering 2 years of data for Medicaid patients in two States will be used. The project will have four overlapping phases over 3 years. The first includes obtaining and preparing the data from various data sources for analyses. The second involves basic descriptive analyses including the development and validation of a clinically meaningful, outcome-oriented, case-mix classification for different subgroups. The third involves multivariate and facility-level analyses to assess the stability of the models and the sensitivity of results to variation in patient group composition, staffing, facility ownership, and/or State regulatory system. The fourth phase involves report preparation and dissemination of the results regarding natural histories of outcome for different subgroups of the nursing home population.

Status: The project began in September 1985. The research design has been finalized. The first year has been spent in developing the several data bases for analysis. The admission cohort data base was constructed and contains 4,668 residents who entered a nursing home for the first time in 1982. The long-stay cohort data base was constructed in the third quarter and contains 2,255 resident cases with a nursing home stay of between 2 and 30 years, with 45 percent being there more than 5 years. Arrangements have been completed regarding the longitudinal data base of Texas nursing home residents. New York has agreed to construct a data base with three assessments of all patients for a subsample of approximately 20,000 residents in 100 facilities. Analysis has begun on the new admission and long-stay data bases to study outcomes in terms of death, hospitalization, continued stay in the facility, and return to the community. Changes in activities of daily living level over time are also being studied.

Planning Study: Phase I of a Major Study of National Long-Term Care Policies

Project No.: ASU000001-03
Period: February 1985 - November 1985
Funding: $ 150,000
Award: Interagency Agreement
Agency: National Academy of Sciences, Institute of Medicine
2101 Constitution Avenue
Washington, D.C. 20418
Project Officer: Judith Sangl
Division of Reimbursement and Economic Studies

Description: The objectives of the planning effort are:

- To identify and define the major policy issues in long-term care that should be examined and assign priorities to them.
- To inventory available information on activities completed and under way with respect to data compilation, research, and policy analysis for evaluation during the course of the study.
- To design the study.

The major study will be designed to facilitate development of a coherent set of public policies for providing and financing cost-effective, long-term care services that will adequately meet the national requirement for such services.

Status: The study report, "Toward a National Strategy for Long-Term Care of the Elderly" was completed in April 1986. This report provides a summary of the major policy issues in long-term care and an inventory of major data bases, analytic studies, research, demonstrations, and experiments on long-term care. The report outlines a study plan to identify a combination of public policy options and private initiatives for creating an optimal long-term care system. A particular emphasis of the study plan is public and private pooled-risk approaches to financing long-term care.

New York State Integrated Quality Assurance System for Residential Health Care Facilities: The Next Step After Case-Mix Reimbursement

Project No.: 11-C-98925/2-01
Period: August 1986 - July 1989
Funding: $ 291,000
Award: Cooperative Agreement
Awardee: New York State Department of Social Services
40 North Pearl Street
Albany, N.Y. 12243
Project Officer: Catherine P. Moylan
Division of Long-Term Care Experimentation

Description: The objective of this project is to link data from the case-mix reimbursement system for use in the quality assurance system, and to integrate the quality assurance processes of survey/certification, inspection of care, and utilization review. The State recently implemented a case-mix payment system for residential health care facilities for which all patients are assessed at least biannually. The resulting data on patient characteristics is audited and entered on a client-specific data base that can be utilized to target quality assurance activities toward facilities that:

- Have staffing patterns that seem inappropriate to needs of patients.
- Have excessive numbers of patients with negative characteristics.
- Have unexpected negative outcomes from one review to the next.

External outcome standards, survey and certification, inspection of care (IOC), and utilization review activities will be integrated into a single, patient-centered process. The use of the case-mix data base will serve to focus reviewer energies on problem facilities. The ability to routinely track significant or potentially significant deteriorations in patient care will trigger off-cycle surveys. Facilities identified as having few or no problems will be targeted for abbreviated surveys.

Status: The State will complete 1 full year under the new federally mandated survey and certification system prior to implementing the integrated survey/certification and IOC process. During this interim year, New York will use its data base to select the stratified random sample for survey and certification.

Impact of the Prospective Payment System on the Quality of Long-Term Care in Nursing Homes and Home Health Agencies

Project No.: 15-C-98971/8-01
Period: August 1986 - January 1988
Fundings: $ 374,011
Award: Cooperative Agreement
Grantee: University of Colorado
1355 South Colorado Boulevard, Suite 706
Denver, Colo. 90222
Project Officer: Philip Cotterill
Division of Reimbursement and Economic Studies

Description: This study will examine patient-level process indicators of quality of care provided to skilled nursing facility and home health patients before and after implementation of the Medicare inpatient hospital prospective payment system (PPS). The pre-PPS data were collected in 1980 and 1983. The post-PPS data will be collected in late 1986 and 1987.

Status: Data collection and analysis plans are under development for this recently funded study.

Study of Long-Term Care Quality and Reimbursement in Teaching and Nonteaching Nursing Homes

Project No.: 18-C-98417/8-03
Period: September 1983 - September 1986
Award: Cooperative Agreement
Funding: $ 808,176
Awardee: University of Colorado Health Sciences Center
4200 East 9th Avenue, C-421
Denver, Colo. 80262
Project Officer: Kathy Ellingson
Division of Long-Term Care Experimentation

Description: This study evaluates the Teaching Nursing Home Program (TNHP) sponsored by the Robert Wood Johnson Foundation (RWJF). The purpose of the TNHP is to improve the health care provided to long-term care patients. Eleven university-based schools of nursing were funded to establish clinical affiliations with one or two nursing homes. This study evaluates the impact of the affiliations on patient outcomes and costs of patient care. Specifically, the study will assess the extent to which the TNHP approach reduces hospitalizations and emergency room care, decreases length of nursing home stays and increases discharge into independent living environments, and enhances health status. A net cost-benefit ratio will be determined. This evaluation is sponsored jointly by the Health Care Financing Administration and RWJF. (RWJF is funding the evaluation from October 1986 until 1988.) In 1986, a supplemental study was funded to examine quality and process care in TNHP's as compared with that in comparison nursing homes. These issues are being studied in seven problem areas: urinary incontinence and urinary catheter, pressure sores, terminal illness, confusion, falls, diabetes, and use of sedatives.

Status: A programmatic analysis providing an indepth look at how TNHP was implemented and operating in different facilities was completed in January 1985. All primary data collection instruments have been developed, and the main activities of the study are currently focused on data collection, processing, and monitoring. The study will be completed in 1988, with results from both the original and supplemental studies available in late 1988.

Data Development and Analyses

Analysis of the 1982 Survey of Informal Caregivers

Funding: Intramural
Project Director: Judith Sangl
Division of Reimbursement and Economic Studies

Description: The 1982 Survey of Informal Caregivers was designed to provide, on a national basis, a comprehensive picture of the informal system for long-term care. A supplement to the 1982 Long-Term Care Survey, the Caregiver Survey collected data on the kind, amount, and cost of informal care for a sample of 1,925 informal caregivers. Informal caregivers are defined as persons providing unpaid care and support to chronically impaired, noninstitutionalized elderly.

Status: The Health Care Financing Administration is collaborating in this analysis with the National Center for Health Services Research. Three reports have been written to date:

- "Caregivers of the Ward Elderly: A National Profile."
- "The Caregiving Role: Dimension of Burden and Benefits."
- "Caregiver Attitudes to Nursing Homes."

The 1982 and 1984 Long-Term Care Surveys

Project No.: IAA-84-P-383 (Data collection for 1984 Survey)
Period: October 1983 - December 1985
Funding: $ 1,900,000
Award: Interagency Agreement
Agency: U.S. Bureau of the Census
Demographic Surveys Division
Suitland, Md. 20233
Project Officer: Herbert A. Silverman
Division of Program Studies

Description: The 1984 Long-Term Care Survey (LTCS) capitalizes on the data collected for the 1982 Survey by interviewing the same persons, thus providing a longitudinal look at the functionally impaired elderly living in the community. The 1984 Survey expanded the scope of the 1982 Survey to provide a cross-sectional look at all functionally impaired Medicare beneficiaries 65 years of age or over no matter where they reside. The 1984 longitudinal component collected data on the functionally impaired persons included in the 1982 Survey and still living in the community, persons now living in institutions, and those who died. The frame for the 1984 cross-sectional component comprised the 1982 sample plus persons who were excluded in 1982 because

they were institutionalized, persons who did not screen into the 1982 Survey because they were not functionally impaired, and persons who aged into the sample, that is persons who were 63 and 64 years of age in 1982 and who were 65 and 66 years of age in 1984. In 1984, persons were interviewed personally by using a detailed community questionnaire similar to the one used in 1982. Interviews were with a proxy for those who were institutionalized or deceased by using abbreviated questionnaires that collected information on services used and sources of payment. Data for 1984 will make possible the analysis of circumstances leading to institutionalization and whether alternatives could have been considered. This would identify methods of intervention to forestall premature or inappropriate nursing home placements and thus reduce current estimates of national expenditures for nursing home services, particularly for the Medicaid program.

Status: Two papers and an article using data from the 1982 Survey have already been produced:

- "1982 Long-Term Care Survey: National Estimates of Functional Impairments Among the Elderly in the Community," presented at the National Association of Welfare Research and Statistics Conference in Hartford, Conn., August 1984.

- "1982 Long-Term Care Survey: Functional Impairments and Sources of Support of Elderly Medicare Beneficiaries Living in the Community," presented at the Gerontological Society of America in San Antonio, Tex., November 1984.

- "A profile of functionally impaired elderly persons living in the community," published in the Health Care Financing Review, Vol. 7, No. 4, Summer 1986.

A public use tape containing the 1982 Survey is currently available for purchase from the National Technical Information Service (NTIS). In early 1987, a similar public use tape for the 1984 survey will be available from NTIS. This tape will contain both longitudinal data (1982 and 1984) for a cohort of approximately 6,400 cases interviewed in both years and a cross-sectional component for 1984. The latter component includes detailed information on approximately 8,400 functionally impaired persons residing in nursing homes, as well as persons residing in the community. Analyses are currently being carried out. Initial reports are expected in 1987.

A National and Cross-National Study of Long-Term Care Populations

Project No.: 18-C-98641/4-01
Period : September 1984 - September 1987
Funding: $ 643,307
Award: Cooperative Agreement
Awardee: Duke University
Center for Demographic Studies
2117 Campus Drive
Durham, N.C. 27706
Project Officer: Herbert Silverman
Division of Program Studies

Description: Based on data from the 1982 and 1984 Long-Term Care Surveys, this project will forecast the size and the socioeconomic characteristics, health status, and cognitive and physical functioning capacities of the aged population in the United States into the middle of the 21st century. These projections would be compared with similar information from other countries. The findings will be useful for planning long-term care programs for functionally impaired aged persons.

The project has been expanded to conduct additional analyses on:

- Identifying clusters of characteristics that distinguish groups of functionally impaired aged persons living in the community and are associated with differential patterns of use and expenditures of home health care services.

- Comparing hospital and post-hospital experiences of persons in the 1982 and 1984 Long-Term Care Surveys and relating them to changes in their functional and health status in the interim. As an extension of this analysis, ascertain whether there have been substitutions for different types of services over time in light of the patients' changed health and functional status. For example, are home health services used more in lieu of nursing home services?

- Describing and comparing out-of-pocket health care expenses relative to aged persons' health status, functional and cognitive disabilities, and access to informal care giving services. This was a special analysis requested for the work of the Secretary of the Department of Health and Human Services, Task Force on Catastrophic Insurance.

- Converting the data tape from the 1984 Long-Term Care Survey to a format suitable for public distribution.

Status: Work is in progress on all aspects of this project. A final report is expected in late 1987.

Long-Term Care Residential Services for Developmentally Disabled People

Project No.: 18-P-98078/5-03
Period: September 1981 - December 1985
Funding: $ 1,166,635
Award: Grant
Grantee: University of Minnesota
207 Pattee Hall
150 Pillsbury Drive, SE.
Minneapolis, Minn. 55455
Project Officer: Marni Hall
Division of Reimbursement and Economic Studies

Description: This project updated the only national information system on long-term care services for the mentally retarded and developmentally disabled (MR/DD). Data were gathered on characteristics of residents and facilities, including intermediate care facilities for the mentally retarded (ICF/MR's). Data from this study were used to track the effects of recent State deinstitutionalization policies. As part of the project, policy analyses of the cost/utilization of Medicaid MR/DD services were made. These analyses focused on: financing of residential care; case mix and movement of residents; and programs, services, and manpower.

Status: This study was completed in 1986. The major findings include the following:

- ICF/MR (both Federal and State) expenditures were the fastest growing component of both State residential care and Medicaid long-term care expenditures.
- Increases in ICF/MR expenditures prior to 1977 were primarily the result of increases in total recipients of care rather than increases in per recipient costs.
- Since 1977, increases in ICF/MR expenditures were primarily the result of increases in per recipient costs. About 70 percent of the increase in program costs from 1977 to 1982 can be attributed to increasing per diem costs.
- Between 1977 and 1982, the proportion of occupied MR/DD residential system beds that were certified for ICF/MR reimbursement grew from 43 percent to 58 percent of total beds.
- The fastest growing segment of the ICF/MR program was the small ICF/MR facilities (15 or fewer residents). These facilities had a net increase of almost 500 percent (7,000 residents) between 1977 and 1982, and tend to be concentrated in a few States.
- Almost all growth in large facilities (16 or more residents) took place through certifying existing facilities for ICF/MR participation, while new small ICF/MR facility beds were generally in newly opened facilities.

- The proportion of residents in large public institutions, whose care was paid for by the ICF/MR program rather than by State funding exclusively, substantially increased between 1977 and 1982.

- A shift from public to private providers is taking place within the ICF/MR program.

- States vary remarkably in the total size and characteristics of their ICF/MR programs, and in the proportion of their residential care systems certified for the ICF/MR program.

- Movement patterns of ICF/MR residents in fiscal year 1982 reflect a continuing trend toward less institutional models of care.

- The ICF/MR population is becoming more severely impaired.

National Academy of Sciences Panel on Statistics for an Aging Population

Project No.: IAA-84-P432
Period: December 1984 - December 1986
Funding: $ 102,000
Award: Interagency Agreement
Agency: National Academy of Sciences
Committee on National Statistics
2101 Constitution Avenue
Washington, D.C. 20418
Project Officer: Judith D. Kasper
Division of Beneficiary Studies

Description: The purpose of this study is to examine the adequacy of current statistical information and methodology, particularly in the area of health and medical care, for an aging population. The study is being conducted through the Committee on National Statistics of the National Academy of Sciences/National Research Council, and is being supported by several Government agencies, including the Health Care Financing Administration, National Institute of Mental Health, National Institute on Aging, National Center for Health Statistics, and Veterans' Administration. The study will determine:

- Whether the data that will be needed during the next decade for policy development for health care for an aging population are available.

- Whether available data are analyzed and used.

- Whether changes or refinements are needed in the statistical methodology used in both policy analysis and in the planning and administration of programs.

Status: A final report will be submitted to the sponsoring agencies during 1987.

Study of Management Minutes, Resource Utilization Groups (RUG)-II, and Other Resource Management Systems

Project No.:	HCFA-86-0964
Period:	September 1986 - June 1987
Funding:	$23,667
Award:	Contract
Contractor:	University of Michigan Institute of Gerontology 300 North Ingalls Ann Arbor, Mich. 48109
Project Officer:	Dana Burley Division of Long-Term Care Experimentation

Description: This project will perform data analyses to compare different case-mix systems that are currently in use or being developed, including the RUG's-II and "management minutes" methodologies.

The data bases will include:

- Data from New York that describes the characteristics and nursing resource use of 3,400 patients in 52 New York State nursing homes, and another larger data set that describes only the characteristics of 100,000 patients.
- Data from Texas on the characteristics and nursing resource consumption of 2,000 nursing home residents.
- Data from the Hillhaven Corporation that describes the characteristics of 37,000 patients in a chain of 325 nursing homes.
- A Medicare data set that describes patient characteristics and nursing and other resource use by 1,800 Medicare patients and 600 non-Medicare patients in 38 nursing homes in five States.

The final report will address the relationships between patient resource management systems and actual nursing time predicted, resource consumptions, and classification systems.

Status: The contract was awarded in August 1986. The task is to be completed in 6 months. A final report is expected in mid-1987.

AFDC Home Health Aides

AFDC Homemaker/Home Health Aide Demonstration

Period: January 1982 - September 1987
Project Officer: Dennis M. Nugent
Division of Long-Term Care Experimentation

Description: This demonstration was developed to study whether Aid to Families with Dependent Children (AFDC) recipients could be trained and employed to provide homemaker/home health aide services to elderly and disabled individuals who were considered at risk of institutionalization. The objectives of the demonstration were to reduce the welfare dependency of the AFDC recipients who participated in the program and to prevent or delay the institutional placement of the functionally impaired clients they served. After the AFDC recipients successfully completed their formal training, the States were required to provide for their full-time employment as homemaker/home health aides with either a private nonprofit or public agency. All of the graduating trainees were offered a job for 1 year under a subsidized arrangement which allowed them to retain Medicaid eligibility for themselves and their families. During this 12-month period, the aides developed the appropriate skills and experience to help them find permanent employment when they left the project.

Status: The demonstration ended in six of the seven participating States on September 30, 1986. A provision in the 1985 Consolidated Omnibus Budget Reconciliation Act continued the project in New Jersey for an additional year. During this demonstration, more than 4,000 welfare recipients have been trained to provide homemaker/home health aide services to approximately 9,500 elderly and disabled clients. New Jersey's participation in the demonstration will end in September 1987.

A Plan for Employing AFDC Recipients as Homemaker/Home Health Aides to Provide Alternatives to Long-Term Care

Project No.: 12-P-98110/6-04
Award: Grant
Grantee: Arkansas Department of Human Services
Seventh and Main Streets
P.O. Box 1437
Little Rock, Ark. 72203

Preventacare: An Alternative to Institutionalization

Project No.: 12-P-98111/4-04
Award: Grant
Grantee: Kentucky Cabinet for Human Resources
CHR Building, Sixth Floor West
275 East Main Street
Frankfort, Ky. 40621

AFDC Homemaker/Home Health Aide Demonstration Project

Project No.: 12-P-98113/2-04
Award: Grant
Grantee: New Jersey Department of Human Services
Capital Place One
222 South Warren Street
Trenton, N.J. 08625

New York State AFDC Homemaker/Home Health Aide Demonstration

Project No.: 12-P-98103/2-04
Award: Grant
Grantee: New York State Department of Social Services
40 North Pearl Street, 7th Floor
Albany, N.Y. 12243

Employment Opportunities for AFDC Recipients in the Homemaker/Home Health Aide Field

Project No.: 12-P-98106/5-04
Award: Grant
Grantee: Ohio Department of Human Services
30 East Broad Street, 27th Floor
Columbus, Ohio 43215

Homemaker/Home Health Aide Project

Project No.: 12-P-98108/4-04
Award: Grant
Grantee: South Carolina Department of Social Services
P.O. Box 1520
Columbia, S.C. 29202

AFDC Recipients as Providers of Services to the Aged and Disabled

Project No.: 12-P-98104/6-04
Award: Grant
Grantee: Texas Department of Human Services
522-A, P.O. Box 2960
Austin, Tex. 78769

Evaluation of the AFDC Homemaker/Home Health Aide Demonstration Project

Project No.: 500-82-0022
Period: June 1982 - December 1986
Funding: $ 454,174
Award: Contract
Contractor: Abt Associates, Inc.
55 Wheeler Street
Cambridge, Mass. 02138
Project Officer: Kathy Ellingson
Division of Long-Term Care Experimentation

Description: The purpose of this project is to evaluate the Aid to Families with Dependent Children (AFDC) Homemaker/Home Health Aide Demonstration and to provide technical assistance to the seven States participating in the demonstration. The three major evaluation objectives are to:

- Assess the costs and effectiveness of the training and employment of AFDC recipients as homemaker/home health aides on subsequent, continued, and nonsubsidized employment.

- Assess the costs and outcomes of providing home health aide services to persons at risk of institutionalization who would otherwise not receive these services.

- Assess the net cost effectiveness and provide policy-relevant projections on large-scale implementation.

Status: Descriptive analyses of the demonstration's first year were presented in seven State-specific reports as well as a cross-State report in July 1984. Other reports documenting the States' experiences in terms of their operational characteristics and those of the participants have also been prepared. The final results of this evaluation will be published in a series of approximately 11 reports covering 3 main categories: client outcomes, trainee outcomes, and overall cost effectiveness. These reports will be available in mid-1987.

Other Long-Term Care

Bioactuarial Estimates and Forecasts of Health Care Needs and Disability

Project No.: 18-P-97710/4-04
Period: June 1980 - April 1987
Funding: $ 600,055
Award: Grant
Grantee: Duke University
2117 Campus Avenue
Durham, N.C. 27706
Project Officer: Paul W. Eggers
Division of Beneficiary Studies

Description: This project employs bioactuarial methods to estimate the need for various types of health services including long-term care. The determinations of levels of need are employed in analyses of the health status of small geographic areas as well as in national projections. The project is also examining how need estimates are being translated into utilization of nursing homes. These applications of bioactuarial strategies for forecasting population change in health status represent an extension of the grant's basic work.

Status: Results of this project include estimates and projections of the incidence and prevalence of specific chronic diseases (for example, cancer) among the elderly population. In addition, the study has provided new insights on the flow of the elderly population through the nursing home system (for example, admission rates and lengths of stay). Finally, the project is developing profiles of the elderly population in terms of the likelihood of their using alternative modes of long-term care. The National Medical Care Utilization and Expenditure Survey and the Long-Term Care Survey, both Health Care Financing Administration-funded efforts, have applied this methodology. Currently, 24 articles have been written under this grant:

- "Bioactuarial models of national mortality time series data: Strategies for making full information estimates of national morbidity distributions," Health Care Financing Review, Vol. 3, No. 3, March 1982.
- "The use of mortality time series data to produce hypothetical morbidity distributions and project mortality trends," Demography, Vol. 19, 1982.
- "The characteristics and utilization pattern of an admission cohort of nursing home patients," Gerontologist, Vol. 24, 1983.
- "Length of stay pattern of nursing home admissions," Medical Care, Vol. 21, 1983.
- "Compartment model methods in estimating costs of cancer," Transactions Society of Actuaries, Vol. 34, 1983.
- "The characteristics and utilization pattern of an admissions cohort of nursing home patients II," Gerontologist, Vol. 24, 1984.

- "Methods and issues in the projection of population health status," prepared for World Health Organization Division of Epidemiological Surveillance and Health Situation and Trend Assessment, World Health Statistics Quarterly, No. 3, 1984.

- "Projecting chronic disease prevalence," Medical Care, Vol. 22, 1984.

- "Strategies for collating diverse scientific evidence in the analysis of population health characteristics: Bioactuarial models of chronic disease mortality for the elderly," Sociological Methods and Research, Sage, Vol. 13, No. 3, 1984.

- "The economic impact of health policy interventions," Risk Analysis, Vol. 3, No. 4, 1983.

- "Life table methods for assessing the dynamics of nursing home utilization: 1976-1977," Journal of Gerontology, Vol. 39, 1984.

- "Morbidity, disability, and mortality: The aging connection," Aging 2000: Our Health Care Destiny, Vol. 2, Springer-Verlag, New York, 1985.

- "An analysis of the heterogeneity of U.S. nursing home patients," Journal of Gerontology, Vol. 40, 1985.

- "Dynamics of health changes in the extreme elderly: New perspectives and evidence," Special issue on the oldest old. Milbank Memorial Fund Quarterly, Vol. 63, No. 2, Spring 1985.

- "The use of grade of membership analysis to evaluate and modify diagnosis-related groups," Medical Care, Vol. 22, No. 12, December 1984.

- "Analytic approaches for determining incidence from prevalence and reported disease duration," Journal of the American Statistical Association, to be published.

- "Life table methods for assessing the dynamics of nursing home utilization: 1976-1977" Journal of Gerontology, Vol. 39, No. 1, 1984.

- "Death and taxes: A contrary view," Population Today, Vol. 12, No. 11, 1984.

- "Future patterns of chronic disease incidence, disability, and mortality among the aged," N.Y. State Journal of Medicine, Vol. 85, No. 11, 1985.

- "Health status and service needs of the oldest old: Current patterns and future trends," Milbank Memorial Fund Quarterly, Vol. 62, 1985.

- "The complexity of chronic disease at later ages: Practical implications for prospective payment and data collection," Inquiry, Vol. 23, 1986.

- "Patterns of intellectual development in later life," Journal of Gerontology, Vol. 41, No. 4, 1986.

- "Assessing health care costs in the elderly," Transactions Society of Actuaries, Vol. 35, 1984.

- "A multivariate approach for classifying hospitals and computing blended rates," Medical Care, Vol. 25, No. 4, 1986.

Final year efforts are directed toward the development of explanatory models of stability and change among Supplemental Security Income recipients who became institutionalized in Medicaid certified facilities. This includes variations in lengths of stay, turnover patterns, and mortality rates. Analyses will separately examine the aged, blind and disabled adults, and disabled children. Plans have been made to incorporate analyses of data from long-term care, case-mix demonstrations in New York and Texas.

Comparison of the Cost and Quality of Home Health and Nursing Home Care

Project No.: 18-C-97712/8
Period: June 1980 - May 1987
Funding: $ 1,578,683
Award: Cooperative Agreement
Awardee: University of Colorado
1355 South Colorado Boulevard, Suite 706
Denver, Colo. 80222
Project Officer: Philip Cotterill
Division of Reimbursement and Economic Studies

Description: This study assesses the cost, quality, and cost effectiveness of nursing home and home health care provided by freestanding agencies and hospital-based facilities. Detailed data on patient conditions and services were collected for a sample of nursing home and home health patients from the following States: Arkansas, California, Colorado, Florida, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Virginia. A subset of patients was tracked over time to observe outcomes.

Status: Some results on home health case mix were reported in a paper, "Hospital-Based and Freestanding Home Health Case Mix: Implications of Medicare Reimbursement Policy":

- In 1982, hospital-based and freestanding home health clients were similar in terms of general characteristics, functional abilities, and the prevalence and severity of long-term care problems.

- The findings of this study are consistent with the Medicare policy of uniform reimbursement limits for hospital-based and freestanding home health agencies.

Additional case-mix data are being collected to permit an analysis of changes in nursing home and home health case mix since the introduction of the Medicare prospective payment system for hospitals in 1983. The project is also assessing the cost effectiveness of nursing home and home health care for patients with the following problems: stroke, decubitus ulcers, congestive heart failure, urinary incontinence, and mental status problems. Emphasis is being placed on comparing outcomes for these patients over time between hospital-based and freestanding nursing home care, and nursing home and home health care. Results are expected in mid-1987.

Three articles have been produced under this cooperative agreement:

- "Cost effectiveness implications based on a comparison of nursing home and home health case mix," Health Services Research, Vol. 20, No. 4, October 1985.

- "Nursing home case-mix differences between Medicare and non-Medicare and between hospital-based and freestanding patients," Inquiry, Vol. 22, Summer 1985.

- "Medicaid and non-Medicaid case-mix differences in Colorado nursing homes," Medical Care, Vol. 24, No. 6, June 1986.

One study paper has been produced:

- "Study Design," revised January 1986.

Encouraging Appropriate Care for the Chronically Ill Elderly: A Controlled Experiment to Evaluate the Impacts of Incentive Payments on Nursing Home Admissions, Discharges, Case Mix, Care, Outcomes, and Costs

Project No.: 11-P-97931/9-04
Period: April 1981 - June 1986
Award: Grant
Grantee: State of California Department of Health Services
714-744 P Street
Sacramento, Calif. 95814
Project Officer: Tony Hausner
Division of Long-Term Care Experimentation

Description: This project is testing a system of incentive payments as a means of encouraging skilled nursing facilities (SNF's) in San Diego to admit and provide quality care to severely dependent patients. Many patients have more lengthy hospital stays than appropriate because of the amount and cost of care these patients would require in a SNF. Health Care Financing Administration waivers permit SNF rates that exceed the Medicaid cost limits by the incentive amounts. Under the terms of the contracts with these SNF's, the incentive payments for patients admitted during the first project year will continue for up to 4 years from the date of admission (1986), if the patient remains in the facility. The National Center for Health Services Research (NCHSR) provides total project funding.

Status: The intake of patients ended April 30, 1982. Patient reassessments continued through April 30, 1983. Waivers ended in June 1986. The evaluation found that during the demonstration: (1) the percentage of admissions for heaviest care patients increased, but the percentage of Medi-Cal patients decreased; (2) the number of discharged patients increased; and (3) the achievement of outcome goals was not affected. These findings indicate the project was not cost effective. NCHSR has published the following reports on this project:

- "Nursing Home Admissions: The Results of an Incentive Reimbursement Experiment."
- "Nursing Home Discharges: The Results of an Incentive Reimbursement Experiment."
- "Nursing Home Patient Outcomes: The Results of an Incentive Reimbursement Experiment."

Effects of Alternative Family Support Strategies

Project No.:	95-C-98281/0-03
Period:	May 1983 - May 1987
Funding:	$ 531,845
Award:	Cooperative Agreement
Awardee:	University of Washington Institute on Aging Seattle, Wash. 98195
Project Officer:	Dana Burley Division of Long-Term Care Experimentation

Description: The purpose of this project is to study the effects of support programs provided to families that care for their elderly members at home. The demonstration will assess the impact of three support strategies: paid respite care, family training and case management, and a combination of respite care with training and case management. The paid respite care includes services provided by a home health agency, three adult day-care centers, and a skilled nursing facility. Families may use any mix of the respite services, up to a maximum dollar limit, for a period of 12 months. Key outcome variables to be measured are family burden, length of time families serve as primary caregivers, propensity toward institutionalization, and cost of long-term care services.

Status: Service delivery ended in July 1986. For the 10 months ending May 31, 1987, project staff will complete the data collection and analyses necessary for project evaluation. The final report will be prepared during this time and is expected by Fall 1987.

Analysis of Long-Term Care Payment Systems

Project No.: 18-C-98306/8-04
Period: April 1983 - February 1988
Funding: $ 1,394,293
Award: Cooperative Agreement
Awardee: Center for Health Services Research
University of Colorado
1355 South Colorado Boulevard, Suite 706
Denver, Colo. 80222
Project Officer: Judith Sangl
Division of Reimbursement and Economic Studies

Description: This project is a comparative analysis of long-term care reimbursement systems in seven States (Colorado, Florida, Maryland, Ohio, Texas, Utah, and West Virginia). The study will combine an empirical analysis of nursing home costs and payments and the determinants of costs with a detailed qualitative analysis of the operations of the reimbursement systems. The comparative analysis across States will be performed through a unique "comparison-by-substitution" method that calculates reimbursement for nursing homes in one State under the assumption that the other States' reimbursement systems are in effect. Data sources for this study include primary facility information and patient samples, as well as secondary sources such as cost reports.

Status: Major project activities include:

- Collection of updated information on the study States' nursing home reimbursement methodologies or capital payment methodologies, and of socioeconomic information about the communities in which the study facilities are located.

- Collection of Medicaid cost-report and payment-rate information for facilities.

- Completion of data collection and data entry for the basic sample of 144 facilities in six States and for the West Virginia augmented sample. Data collection was begun for the remaining three augmented samples (hospital-based, high Medicare, and case-mix change).

- Initial analyses of case-mix differences across States, types of reimbursement systems (class rate, facility specific, and case mix), and facilities (profit, nonprofit, urban, rural), using data from the basic sample.

- Further development of and testing of the comparison by substitution model. It has been refined to analyze more directly the resources used (in terms of registered nurse, licensed practical nurse, and aide staff hours) under different case-mix systems.

The following reports have been prepared:

- "Case-Mix Measures and Medicaid Nursing Home Payment-Rate Determination in West Virginia, Ohio, and Maryland."
- "Overview of Medicaid Nursing Home Reimbursement Systems."
- "Case-Mix and Capital Innovations in Nursing Home Reimbursement."
- "An Analysis of Long-Term Care Payment Systems: Research Design."
- "Medicaid and Non-Medicaid Case-Mix Differences in Colorado Nursing Homes."
- "Case-Mix Reimbursement for Nursing Home Services: A Three-State Simulation Model."
- "Case Mix in Connecticut Nursing Homes: Medicaid Versus Non-Medicaid, Profit Versus Non-Profit, and Urban Versus Rural Patient Groups."
- "A Methodology to Examine Nursing Home Profits."

A final report is expected in mid-1988.

Long-Term Care of Aged Individuals With Hip Fractures: Public Versus Private Costs

Project No.:	18-C-98393/3-03
Period:	September 1983 - September 1987
Funding:	$ 711,793
Award:	Cooperative Agreement
Awardee:	University of Maryland Medical School 655 West Baltimore Street Baltimore, Md. 21201
Project Officer:	Judith Sangl Division of Reimbursement and Economic Studies

Description: This study is examining, in detail, the complex economic and psychosocial determinants of the public and private contribution to the long-term care of a group of aged individuals who suddenly become disabled by hip fractures. The impact of family size and composition, social support, family economic resources, and the aged individual's physical and mental health will be analyzed in terms of the decision to enter a nursing home or return home.

Status: Baseline interviews for 650 patients from seven hospitals in the Baltimore, Maryland area have been completed. Followup interviews at 2- and 6-month intervals are being completed. Information has been obtained about health insurance benefits available to the Maryland study subjects from the four major insurance companies in the area and from the State concerning Medicaid. Preliminary data analysis has begun.

Responsibility of Children for Financing Institutional Care: Potential Response and Possible Adjustments

Project No.: 18-C-98375/1-02
Period: November 1983 - May 1985
Funding: $ 80,000
Award: Cooperative Agreement
Awardee: Hebrew Rehabilitation Center for the Aged
1200 Centre Street
Boston, Mass. 02131
Project Officer: Judith Sangl
Division of Reimbursement and Economic Studies

Description: The objective of this project is to determine the barriers to and potential for alternate payment schemes for long-term care, particularly nursing home care, by the children of the elderly. The research will:

- Provide an estimate of children's resources available to share in the costs of long-term care.
- Assess the attitudes of those children toward proposals for sharing in the costs of their parents' long-term care and identify factors associated with those who have positive and negative feelings.
- Assess the market for a new type of insurance for nursing home care and identify factors associated with those who are and are not interested in such insurance.

Status: Interviews were conducted of about 2,200 elderly in Massachusetts and a sample of 350 of their adult children. The study found that more than 40 percent of the elderly expressed an interest in purchasing long-term care (LTC) insurance to cover services either in the home or in a high quality institution. Of the elderly interested in LTC insurance, 78 percent indicated that they could afford to pay $25 a month for such coverage. There was considerable variation in those who were interested in such coverage. Those who were interested were not clearly differentiated from those who were not by such factors as marital status, age, number of children, and living arrangement, although economic factors were quite predictive of level of interest. In terms of the interest expressed by children of the elderly in the purchase of LTC insurance for their parents, the study found that there was considerable interest, with 52 percent willing to pay for such insurance were it to become available. Study findings concerning the potential market for long-term care insurance indicate that there was a number of differences between children who were interested and those who were not interested in purchasing nursing home insurance for their parent(s). Children who were not interested in buying such insurance are more likely to provide help with cooking and cleaning (73 percent versus 62 percent) and transportation (84 percent versus 68 percent), more likely to visit their parent(s), and less confident about whether they could provide more financial help if it were needed. Children who were interested in buying LTC insurance for their parents were more likely to consider themselves the primary caretaker of their parent, more willing to have their parent move in with them, less confident that family and friends could provide more help if needed, and more likely to indicate a willingness to pay for outside help for their parent if necessary.

Can Geriatric Nurse Practitioners Improve Nursing Home Care?

Project No.: 18-C-98379/9-03
Period: September 1983 - February 1987
Funding: $ 638,360
Award: Cooperative Agreement
Awardee: The Rand Corporation
1700 Main Street
Santa Monica, Calif. 90406
Project Officer: Judith Sangl
Division of Reimbursement and Economic Studies

Description: The purpose of the study is to evaluate the potential of the use of geriatric nurse practitioners (GNP's) for improving outcomes of care and containing costs in skilled nursing facilities. The 30 nursing homes that participated in the Mountain States Health Corporation's GNP demonstration project will be compared with 30 nursing homes in the region that did not participate. Comparisons will be made of:

- Patient outcomes.
- Process of care.
- Nursing home costs.
- History of certification deficiencies.

Homes will be matched by State, ownership, bed size, and urban, suburban, or rural location.

Status: Case-study interviews with nursing home administrators, directors of nursing, and GNP's have been completed and are being analyzed. Almost all of the prospective patient and family satisfaction interviews have been completed and analysis of the data from the prospective study has begun. Approximately, three quarters of the medical record reviews and more than one-half of the nursing home inspection data have been collected. Medicaid and Medicare cost reports are being collected and analyzed.

Case-Managed Medical Care for Nursing Home Patients

Project No.: 95-P-98346/1-04
Period: July 1983 - July 1987
Award: Grant
Grantee: Massachusetts Departments of Public Welfare
180 Tremont Street
Boston, Mass. 02111
Project Officer: Jean L. Bainter
Division of Long-Term Care Experimentation

Description: The Health Care Financing Administration (HCFA) granted Medicare and Medicaid waivers to the Massachusetts Department of Public Welfare to permit fee-for-service reimbursement for the provision of medical services by physician-supervised nurse practitioners/physician assistants (NP/PA) for residents of nursing homes. This permits increased medical monitoring that is expected to generate cost savings as a result of fewer hospital admissions and outpatient visits. Providers will be responsible for managing and monitoring the health care and medical condition of all enrollees to assure that the primary care needs of nursing home patients are met in a timely fashion, often without resorting to the hospital emergency room. Initial physical exams, medical evaluation, and reevaluations will be performed by the NP/PA in the nursing home. The NP/PA will operate under written protocols that describe the common medical problems to be encountered and appropriate evaluation and treatment procedures. The supervising physician reviews and countersigns the NP/PA's evaluation and prescriptions. The physician is also consulted in any unusual situation or emergency.

Status: The first year of this project was a developmental phase, which included marketing the concept to other providers (individual physicians and groups) and to nursing home administrators. During the second year, 11 additional providers joined the project. The patient population is expected to reach 2,500 in 75-100 nursing homes, in the care of 15 providers. The Rand Corporation, as part of the Research Center Cooperative Agreement with HCFA, will evaluate this project focusing on the project's impact on the use and cost of nursing home and hospital services. This evaluation will rely primarily on Medicare and Medicaid claims data. The Pew Foundation has awarded a challenge grant to the University of Minnesota to assess the project's impact on quality of care.

Evaluation of Massachusetts Case-Managed Medical Care for Nursing Home Patients

Project No.:	15-C-98489/9-02
Period:	April 1985 - November 1988
Funding:	$ 300,000
Award:	Cooperative Agreement
Awardee:	The Rand Corporation 1700 Main Street Santa Monica, Calif. 90406
Project Officer:	Tony Hausner Division of Long-Term Care Experimentation

Description: The Health Care Financing Administration granted Medicare and Medicaid waivers to the Massachusetts Department of Public Welfare to permit fee-for-service reimbursement for the provision of medical services by physician-supervised nurse practitioners/physician assistants for 6,500 residents of nursing homes. This will permit increased medical monitoring that is expected to generate cost savings as a result of fewer hospital admissions and hospital outpatient visits. This evaluation will focus on the impact of the project on the use of nursing home services and hospital emergency room and outpatient services. The University of Minnesota is conducting a related evaluation on the impact of the project on quality of care.

Status: Rand and Minnesota submitted an approved research plan in March 1986. They will retrospectively collect data for the study period March 1986 to March 1987. This data collection will be completed in October 1987. Rand is currently collecting and analyzing Medicare and Medicaid claims data in order to select a matched control group. The final report is due in Fall 1988.

Massachusetts Health Care Panel Study of Elderly—Wave IV

Project No.:	18-C-98592/1-02
Period:	July 1984 - December 1986
Funding:	$ 152,408
Award:	Cooperative Agreement
Awardee:	Harvard University/Harvard Medical School 1350 Massachusetts Avenue Holyoke Center 458 Cambridge, Mass. 02138
Project Officer:	Marni Hall Division of Reimbursement and Economic Studies

Description: This project collected the fourth wave of self-reported information from the Massachusetts Health Care Panel Study cohort, a group that was selected 10 years ago as a statewide probability sample of all persons 65 years of age or over. The data from the first three waves were analyzed and the results have been reported in numerous articles in professional journals. In this project, the data from all four waves are being analyzed to determine markers of functional decline during pre-death, predictors of long-term care institutionalization, and interrelationships between physical, behavioral, and social characteristics and subsequent health care and social service utilization and mortality.

Status: All of the data for this project have been gathered. Analysis of the data is under way, and a final report is expected in early 1987.

Longitudinal Study of the Impact of Prospective Reimbursement Under Medicaid on Nursing Home Care in Maine

Project No.: 18-C-98307/1-03
Period: June 1983 - January 1987
Funding: $ 467,314
Award: Cooperative Agreement
Awardee: University of Southern Maine
Human Services Development Institute
246 Deering Avenue
Portland, Maine 04102
Project Officer: Judith Sangl
Division of Reimbursement and Economic Studies

Description: This project studies the recently implemented nursing home prospective reimbursement system in Maine. The study will provide a longitudinal evaluation of the design and implementation of the system for intermediate care facilities in the State and of the system's effectiveness in achieving the policy goals of containing costs, maintaining or improving quality, and ensuring access to nursing home care by Medicaid recipients. The study consists of three major components:

- An impact analysis of the effects of prospective reimbursement on costs, quality, and access.
- A case study of the politics of the implementation of prospective reimbursement.
- An analysis of organizational and management response of nursing home administrators to the changes resulting from prospective reimbursement.

The hypotheses of the study are closely tied to the objectives of recently passed reimbursement legislation which includes incentives for maintaining and increasing Medicaid patient load. The awardee will try to measure immediate versus long-term effects of the new system on costs to the State.

Status: Major project activities are:

- Survey of nursing home administrators and directors of nursing regarding the industry's response to the new reimbursement system.
- Collection of patient-assessment data for the case-mix measures, and nursing home licensure and certification survey data for measures of quality of care.
- Collection of historical cost-report data for 3 years prior to and 1 year during implementation of the prospective reimbursement system.
- Development of facility-level case-mix measures and of structural measures of quality of care.
- Initiation of data envelopment analysis (an optimization technique) of nursing home efficiency.

Collection of audited cost-report data for post-implementation years is continuing. Preliminary analyses have begun using currently available data. Three reports have been prepared:

- "The Development and Implementation of Maine's Nursing Home Prospective Payment System."
- "Management Responses to Maine's Nursing Home Prospective Payment System."
- "A Longitudinal Study of the Impact of Medicaid Prospective Reimbursement on Nursing Home Care in Maine: An Analysis Plan."

New York State Case-Mix, Prospective Reimbursement System for Long-Term Care

Project No.: 11-C-98325/2-03
Period: August 1983 - January 1987
Funding: $ 416,012
Award: Cooperative Agreement
Awardee: New York State Department of Social Services
40 North Pearl Street
Albany, N.Y. 12243
Project Officer: Elizabeth S. Cornelius
Division of Long-Term Care Experimentation

Description: The New York State Department of Social Services was awarded a Section 1115 grant, effective August 7, 1983, to develop, test, and refine a long-term care prospective reimbursement system based on clusters of patient characteristics. This is a 3-year cooperative agreement being conducted by the New York State Department of Health and Rensselaer Polytechnic Institute. The system builds on the results of research conducted at Yale University which developed clusters of patients in relation to staff resources used (resource utilization groups or RUG's). The purpose of the project is to promote efficiency by associating payment levels with patient characteristics that indicate the amount of actual resources used by patients.

Status: During the first year, the RUG's were revised and tested. The result is a classification system (RUG's II) that accounts for 52 percent of the variance of nursing and other staff resources used by patients. RUG's II uses five clinical groupings and an activities-of-daily-living sum to develop 16 distinct resource utilization groupings. During the second year, the case-mix "weight" for each of the groups was developed. A short patient-review form was designed and tested along with an audit process. The basic design of the reimbursement system has been developed and includes:

- A price-based payment system with two major components, one of which is patient care. A 15-percent corridor was established the first year to ease the transition from a cost-based to a price-based system.
- A system to review all patients in a facility every 6 months and all new admissions quarterly.
- A concurrent audit system.

Regulations have been formulated, approved, and operationalized. All patients in long-term care facilities have been reviewed three times now for rate-setting purposes. The case-mix index (CMI) for long-stay residents was .92 in 1985 and .96 in August 1986. The CMI for new admissions was .96 in 1985 and 1.07 in August 1986. This demonstrates that the incentives are working relatively well, with facilities admitting heavier-care patients but holding long-stay residents at a stable level of function. During the first year of operation, only 22 of 600 facilities have lost delegated authority to do their own resident assessments. The RUG's II have been compared with three other case-mix measures, and researchers have reported 93 percent agreement between the data sets. The project will be completed in January 1987 and the final report should be available shortly thereafter.

Texas Long-Term Care Case-Mix Reimbursement Project

Project No.:	11-C-98688/6-02
Period:	September 1984 - March 1987
Funding:	$ 293,803
Award:	Cooperative Agreement
Awardee:	Texas Department of Human Services 701 West 51st Street Austin, Tex. 78769
Project Officer:	Elizabeth S. Cornelius Division of Long-Term Care Experimentation

Description: The Texas Department of Human Services was awarded a 2-year cooperative agreement effective September 30, 1984, to develop and test a prospective case-mix payment methodology for long-term care facilities. Case-mix payment involves assessment of patient characteristics associated with various patterns of service needs and payment at a rate appropriate to that need. The case-mix payment methodology will reflect institutional case mix and the associated costs of service. The purpose of the project is to develop a more equitable payment system for long-term care providers than the current flat-rate system for reimbursement of skilled nursing and intermediate care facilities services. The project built on the results of research conducted in the State of New York. It includes:

- Two data collections of patient characteristics and staff-time measurement for 2,000 patients each.
- Analysis of long-term care reimbursement systems in Illinois, Minnesota, Maryland, Ohio, New York, and West Virginia, using the Texas data base.
- Simulation of various case-mix classifications systems using AUTOGRP.
- Determination of the best classification method for Texas and the development of a payment system.
- Identification of potential problems in implementing a case-mix payment system.

Status: The first year the State staff met extensively with the other States working on case mix. They conducted a conference of researchers and State representatives interested in case mix to review patient-assessment instruments, determine the most appropriate patient descriptors, and discuss issues involved in developing payment systems. A comparative chart of the six States' assessment instruments was developed and 100 descriptors and scales were studied. A report of the conference was prepared. In the second year, the State developed a client assessment and research evaluation tool and a staff-time process. The first data collection was completed in March 1986. A patient-specific data base was created of descriptors and direct staff-time utilization for 1,997 patients. The interrater reliability between the facility primary nurse assessor and the outside nurse auditor was 95.6 percent overall (the activities-of-daily-

living scales agreement was 86.3 percent and the psychosocial and behavioral descriptors agreement was 92 percent). The State has done a comparison of direct staff time to RUG's II categories and found that the relative index scores match the New York index well, both in proportion of patients in each group and relative staff time. Other analyses will be completed in the coming months, along with a second data collection.

Design, Implementation, and Evaluation of a Prospective Case-Mix System for Nursing Homes in Massachusetts

Project No.:	11-C-98924/1-01
Period:	August 1986 - August 1989
Funding:	$ 362,312
Awardee:	Massachusetts Department of Public Welfare Medical Assistance Division 600 Washington Street Boston, Mass. 02116
Project Officer:	Dana Burley Division of Long-Term Care Experimentation

Description: This project will design, implement, and evaluate a prospective case-mix system for a random sample of nursing homes in Massachusetts. This payment system will develop and test incentives for these nursing homes to admit and treat heavy-care patients while minimizing declines in quality of care. Experimental facilities will be compared to facilities that will continue to be reimbursed under the present system. A minimum of 50 experimental and 50 control homes will participate. The system will modify four of seven components of the nursing home reimbursement system currently used in the State. For demonstration facilities, nursing services payment will be case-mix adjusted using "management minutes." Incentives to admit and treat heavy-care patients will be used to further modify the nursing cost center. Various financial incentives will also be used to reduce other "controllable" operating costs.

Status: The cooperative agreement was awarded in August 1986. During the first year, project staff will finalize aspects of the proposed payment system, assign volunteer nursing homes to the experimental and control groups, and improve their quality assurance mechanisms.

Quality of Life Among Life-Care Facility and Community Residents: A Comparison

Project No.:	18-C-98630/4-01
Period:	November 1984 - February 1986
Funding:	$ 28,539
Award:	Cooperative Agreement
Awardee:	Duke University Medical Center Center for the Study of Aging and Human Development Box 3003 Durham, N.C. 27710
Project Officer:	Judith Sangl Division of Reimbursement and Economic Studies

Description: The objective of this project is to determine whether living in a life-care facility (where, typically, life-long care is assured and services are accessible) has an impact on residents' quality of life (defined in terms of functional status), that is significantly different from that of community residents, and whether the services used and the cost of maintaining or attaining a particular functional status is the same for life-care residents as for matched community residents. The study will use longitudinal data collected from a life-care facility in North Carolina and from the General Accounting Office survey of elderly people in Cleveland, Ohio.

Status: The project found that life care residents had increased social interaction and improved mental health. They were in comparatively poorer physical health at entry than were community residents, but they maintained their self-care capacity despite physical health declines. When first surveyed, the life-care residents and community elderly used similar services to a similar extent. A year later, service use changed little for community elderly, but life-care residents had notable increases in use of the kinds of services provided by the life-care facility—social/recreational, homemaker/household, checking, meal preparation, continuous supervision, personal care, physical therapy, and nursing care. Overall, service costs for life-care facility residents are significantly higher. But, when viewed in terms of functional equivalence, the service costs for life-care residents whose functional status improved during the 12-month period or remained unimpaired were typically lower than costs for comparable community elderly. When functional status remained or became impaired, life-care residents' costs were typically higher than those of community elderly. The researchers conclude that a more adequate sample needs to be studied to solidify the quantitative relationships between service use, service cost, and functional class.

Evaluation of "Life-Continuum of Care" Residential Centers in the United States

Project No.: 18-C-98672/1-01
Period: January 1985 - January 1988
Funding: $ 806,366
Award: Cooperative Agreement
Awardee: Hebrew Rehabilitation Center for Aged
1200 Centre Street
Boston, Mass. 02131
Project Officer: Judith Sangl
Division of Reimbursement and Economic Studies

Description: The objective of this 3-year project is to obtain information about the characteristics of continuum of care residential center (CCRC) facilities and their residents and compare them with elderly residents living in the community with respect to quality of life and health, service costs, and utilization. Data will be gathered from 20 CCRC's in four areas: California, Arizona, Florida, and Pennsylvania. These sites will be stratified according to the type of contract offered (extended versus limited), the age of the facility, and the income level of those enrolled. Three types of CCRC residents will be selected from the sites for the study sample: new admissions (580), existing residents, both short- and long-stay residents (1,640), and residents who died just prior to or during the field data gathering period (660). Quality of life and service utilization data will be gathered at two points in time, at baseline and 12 months later. Three types of comparison samples will be employed: a representative sample of elderly in their own homes or independent apartments (2,422); a national sample of elderly living in congregate housing settings (2,350); and a representative sample of elderly who have died and for whom retrospective data are available for their last year of life (1,500).

Status: The following activities have been performed:

- Recruitment of the CCRC's.
- Design and pretest of interview schedules for CCRC residents, managers, and family members of deceased residents and of data collection forms for CCRC facility data.
- Completion of baseline interviews and initiation of post-test and death followup interviews.
- Collection of fiscal and organizational data concerning CCRC facilities.

Comparison by State of SNF/ICF Types: Beds, Staffing, Utilization, and Ownership

Funding: Intramural
Project Director: Elizabeth S. Cornelius
Division of Long-Term Care Experimentation

Description: This project unduplicated the count of skilled nursing facilities (SNF's), intermediate care facilities (ICF's), and their respective beds for 1981. The facility and bed count are based on the Medicare/Medicaid Automated Certification System (MMACS) data as of May 31, 1981. Full-time equivalents for registered nurses, licensed practical nurses, physical therapists, occupational therapists, speech pathologists, pharmacists, qualified social workers, and dietitians have also been identified. A staffing matrix showing the relationship to current staffing regulations was developed. In addition, a staffing matrix, using number of beds to nurse staffing ratios, was tested in 1981. The project was conducted in conjunction with a project funded by the Office of the Assistant Secretary for Planning and Evaluation (ASPE), Department of Health and Human Services, which evaluated the usefulness of MMACS for research and policy-analysis purposes. The intramural analysis examined State-by-State differences in:

- Types of certified, long-term care facilities (SNF only, SNF/ICF combination, and ICF only).
- Certified bed supply in relation to the population and total long-term care bed supply.
- Professional staffing levels.

Updating and unduplicating of the 1984, 1985, and 1986 files have been approved so that bed supply and staffing can be compared for a multiperiod that involves both pre- and post-diagnosis-related group (DRG) payments of hospitals. The analysis will identify what percent of the total certified beds were used by Medicare, Medicaid SNF, and Medicaid ICF patients during fiscal year 1981 and later years.

Status: The ASPE evaluation has been completed, and the final report has been accepted by the Department. The evaluation found that the staffing data are acceptable for a State-level analysis. An unduplicated tape has been prepared and tables have been constructed. The staffing data have been cross-checked with the Master Facility Inventory File maintained by the National Center for Health Statistics, and a research file at Columbia University. A comparison of the bed data has been made with the 1980 and 1982 Master Facility Inventory. The data match and thus enable a comparison of total long-term care beds to certified beds. The unduplicated file is being used by several grantees and contractors relative to nursing home supply and demand studies. The 1984 and 1985 files are being checked against State licensure directories and unduplication is complete for 1984. The 1984 file is available and the 1985 file will be available shortly. By 1987, changes in the entry processing method of the MMACS master file will be completed. The revised method will allow better comparison of the ongoing data. Papers completed include:

- "The Medicare/Medicaid Automated Certification System: Applications to Long-Term Care."
- "Interstate Variation in Medicare Skilled Nursing Facility Patient Characteristics."

Comparative Study of State Approaches to Long-Term Care System Reform

Project No.: 18-C-97923/3-04
Funding: $ 199,826
Award: Cooperative Agreement
Awardee: National Governors' Association
Center for Policy Research
Hall of States
444 North Capitol Street
Washington, D.C. 20001-1572
Project Officer: Leslie N. Saber
Division of Long-Term Care Experimentation

Description: The Health Care Financing Administration and the Office of the Assistant Secretary for Planning and Evaluation are co-sponsoring this 1-year study by the National Governors' Association (NGA). The purpose of the study is to compare and assess the strategies employed by six States (Arkansas, Illinois, Maine, Maryland, Oregon, and Wisconsin) to consolidate their authority over the long-term care services system so that resources can be more rationally allocated between institutional and community settings. The study will describe how States are capitalizing on existing system flexibilities, what policy and programmatic waivers must be overcome to achieve State goals, and what State practices seem most effective in achieving system change. It is anticipated that the results will be valuable for future State policy development and could also identify changes in Federal policy that could support the development of new solutions to long-term care problems.

Status: In March 1986, a committee of experts was convened to select the six case study States. Several of these experts and additional consultants also met in March to serve as an advisory committee to NGA for reviewing the overall study design and identifying the information needs and resources that should be addressed during the State field visits. Between June and August 1986, the project staff completed their State visits. A draft report is expected in January 1987.

State Medicaid Nursing Home Policies, Utilization, and Expenditures

Project No.:	18-C-98765/9
Period:	September 1985 - September 1987
Funding:	$ 156,805
Award:	Cooperative Agreement
Awardee:	University of California at San Francisco 3rd and Parnassus Avenues San Francisco, Calif. 94143
Project Officer:	Gerald S. Adler Division of Beneficiary Studies

Description: The project will examine Medicaid long-term care use and cost across the 50 States as they are affected by State policies (utilization controls, eligibility rules, and reimbursement). Focus is on the impact of controls implemented during the period 1982-85, using annual statistical reports (HCFA Form 2082, Statistical Report on Medical Care: Recipients, Payments, and Services) and other sources for data.

Status: The project was funded in September 1985. Most of the data have been collected and the analysis phase has begun.

Competition

Health Care Alternatives Within Title XIX: Evaluation of Alternative Reimbursement Methods to Providers of Primary Care Medical Services

Project No.: 11-C-98321/5
Period: April 1983 - March 1986
Funding: $ 585,675
Award: Cooperative Agreement
Awardee: Michigan Department of Social Services
300 South Capitol Avenue
Lansing, Mich. 48909
Project Officer: Gerald S. Adler
Division of Beneficiary Studies

Description: The study examines the consequences of enrollment in innovative medical care organizations for the cost, effectiveness, quality, and accessibility of medical care provided to Medicaid populations in Michigan. The organizational types to be compared are:

- Health maintenance organizations (HMO's).
- Capitated ambulatory plans (CAP's) that do not cover inpatient, dental, long-term care, or personal care.
- Physician's primary sponsor plans (PPSP's) in Wayne County that feature case management, although care is paid for on a fee-for-service basis.

These organizations form a continuum of provider risk, and they are to be compared with standard fee-for-service care.

Status: Analysis of utilization data has been completed and a final report is expected to be available by early 1987.

Demonstration and Evaluation of Competitive Bidding as a Method of Purchasing Durable Medical Equipment

Project No.: 500-85-0050
Period: September 1985 - September 1990
Funding: $ 1,489,661
Award: Contract
Contractor: Abt Associates
4250 Connecticut Avenue
Washington, D.C. 20008
Project Officer: Jeff McCombs
Division of Hospital Experimentation

Description: The project will test the feasibility of using competitive bidding as a method of establishing the prices Medicare pays for durable medical equipment. The project should provide the Health Care Financing Administration with considerable information on whether the current payment levels for durable medical equipment are properly set. The project consists of three phases:

- Phase I. Design the bidding model, select demonstration sites, and prepare bidding documents.
- Phase II. Administer the bidding systems.
- Phase III. Evaluate the demonstration.

The total time of the project is 5 years.

Status: The decision on whether or not to implement the demonstration will be made after the final design is approved and Medicare waivers are sought for the project. The competitive bidding system design report should be available in Fall 1986. The demonstration design report and evaluation design report should be available in early 1987. The first site is scheduled for implementation in Spring 1987, with the remaining sites being implemented sequentially.

Demonstration and Evaluation of Competitive Bidding as a Method to Purchase Clinical Laboratory Services

Project No.: 500-85-0052
Period: September 1985 - September 1989
Funding: $ 1,509,605
Award: Contract
Contractor: Abt Associates, Inc.
55 Wheeler Street
Cambridge, Mass. 02138
Project Officer: Paul A. Gurny
Division of Hospital Experimentation

Description: The project will test the feasibility of using competitive bidding as a method to purchase clinical laboratory services in specific areas. It should provide the Health Care Financing Administration with considerable information on whether the current Medicare fee schedule for clinical laboratory tests is set at a proper level and also provide valuable information on the utility of a relative value scale (RVS) for laboratory services. The project consists of three phases:

- Phase I. Design the bidding model, select demonstration sites, develop an RVS, and prepare bidding documents.
- Phase II. Administer the bidding systems.
- Phase III. Evaluate the demonstration.

The total time for the demonstration is 4 years.

Status: The contract for this outpatient clinical laboratory, competitive-bidding demonstration and evaluation was awarded in September 1985. The demonstration design report is scheduled to be completed by December 1986. Phase I, the design phase of the project, is scheduled to be completed by December 1986. A decision on whether to proceed into Phase II will depend on a review of the final design and the approval of the project waivers.

Independent Broker: Coordinating Open Enrollment for Medicare Health Maintenance Organizations and Competitive Medical Plans

Project No.:	95-C-98750/0-01
Period:	September 1985 - August 1988
Funding:	$ 276,173
Award:	Cooperative Agreement
Awardee:	HealthChoice, Inc. 621 SW. Alder, Suite 820 Portland, Oreg. 97205
Project Officer:	Kathleen Connors Division of Health Systems and Special Studies

Description: This project will test the efficacy of an independent broker conducting a coordinated open enrollment period for Medicare beneficiaries. The broker will produce and distribute information comparing the options available under the Medicare program for Medicare eligibles. Los Angeles and San Francisco, California, are the two sites the Health Care Financing Administration has chosen for the demonstration to be implemented. This is the second broker demonstration involving HealthChoice and varies from the other in that the broker will only coordinate health maintenance organization fairs and perform other marketing functions for at least three Tax Equity and Fiscal Responsibility Act alternative health plans in each of the two cities. HealthChoice will not be providing indepth beneficiary counseling and/or enrollment functions as in the other demonstration.

Status: During the first year, HealthChoice held one coordinated open enrollment period in San Francisco. During the 1-month open enrollment period, they held 102 fairs throughout the city with approximately 1,500 attendees. A coordinated open enrollment period is scheduled for Los Angeles and San Francisco in 1987. HealthChoice is also pursuing sponsorship for a conference for employee benefits coordinators and business concerns to educate them about retiree HMO insurance options.

Capitation Payment System for All End Stage Renal Disease Services

Project No.: 95-C-98497/9-02
Period: January 1985 - April 1991
Funding: $ 465,000
Award: Cooperative Agreement
Awardee: El Camino Hospital District Corporation
2500 Grant Road
Mountain View, Calif. 94042
Project Officer: Marla Aron
Division of Health Systems and Special Studies

Description: This project will develop and test a competitive capitation program under which capitation payments would cover all Medicare benefits to end stage renal disease (ESRD) patients, including transplants. The awardee will negotiate a capitation rate with the Health Care Financing Administration (HCFA). A delivery system similar to a health maintenance organization (HMO) will be developed and will include case management for ESRD patients, patient incentives, physicians' incentives and risk taking, preferred provider contracts, and quality assurance measures.

Status: During the first 18 months, El Camino focused efforts in three major areas: refining the model, collecting and analyzing data for developing a capitation rate, and trying to obtain Knox-Keene licensure to operate as an HMO. Project staff have analyzed ESRD data to develop a regional composite experience rate for ESRD. The experience of transplant patients is separated from other disease management organization (DMO) patients. The DMO is seeking exemption from Knox-Keene regulations which require risk-bearing health plans to meet certain reserve, reinsurance, and other criteria. El Camino has proposed that HCFA assume the risk for the DMO for the first year. In addition, the project has completed a stop-loss analysis, a quality assurance system, an automated management information system, and consumer marketing surveys. The project is preparing to negotiate capitation rates with HCFA.

Design of a Demonstration and Assessment of Competitive Health Insurance Proposals in the End Stage Renal Disease Program

Project No.: 14-C-98275/3-03
Period: April 1983 - April 1987
Funding: $ 879,694
Award: Cooperative Agreement
Awardee: The Urban Institute
2100 M Street, NW.
Washington, D.C. 20037
Project Officer: Marla Aron
Division of Health Systems and Special Studies

Description: This project will determine the feasibility of demonstrations to test competitive financing approaches in the end stage renal disease (ESRD) program, with possibilities including:

- Competitive bidding.
- Global capitation covering all medical care costs.
- Partial capitation covering only outpatient ESRD services.
- Voucher payment allowing patients to share in the financial savings of cost-reducing shifts.

Status: During the second project period (May 1, 1985 - April 29, 1986), Urban Institute assisted the Office of Demonstrations and Evaluations in implementing a competitive bidding model. The competitive bidding demonstration started April 1, 1985. The Health Care Financing Administration (HCFA) selected Riverside, California, and Denver, Colorado, as demonstration sites. All independent and hospital-based providers of outpatient dialysis services in Riverside and Denver were asked to submit a bid, not to exceed the Medicare composite rate for independent facilities, for providing maintenance dialysis services to Medicare beneficiaries. An approved competitive bid would serve as the basis of Medicare reimbursement to that facility. Beneficiaries would receive a cash incentive payment equal to 70 percent of the difference between the composite rate for independent facilities and the bid rate of the facility. Any facility not submitting a bid, or submitting a bid higher than the composite rate, would receive its normal composite rate payment. The demonstration would test whether the potential for increased case loads would induce facilities to bid lower prices; and whether cash incentives would induce beneficiaries to seek lower priced facilities. HCFA received no bids from Riverside. One facility in Denver bid $12 below the composite rate, but the facility withdrew from the demonstration in September 1985 because of the lack of patient transfers. During the final project period, The Urban Institute will prepare the following reports: an analysis that relates case-mix measures to cost, issues of patient and provider choice, and quality of care.

Medicare Competition Demonstration

Project No.: 500-82-0051
Period: September 1982 - September 1987
Funding: $ 980,646
Award: Contract
Contractor: HealthChoice, Inc.
621 SW. Alder Street
Suite 820
Portland, Oreg. 97205
Project Officer: Kathleen Connors
Division of Health Systems and Special Studies

Description: This project will test the viability of an independent broker for Medicare beneficiaries in an area (Portland, Oregon) with multiple health plans. As broker, HealthChoice markets to beneficiaries and counsels them as to which alternative health plans (AHP's) are available and what benefits each offers. HealthChoice is also testing the impact of a voucher on beneficiaries. Half of the people in the HealthChoice market area will receive a "nonnegotiable" voucher redeemable only at HealthChoice. HealthChoice has also provided assistance to organizations that wished to establish themselves as AHP's.

Status: Presently, three Portland area risk-based health maintenance organizations are participating in the demonstration: Blue Cross/Blue Shield of Oregon, Physician InterHospital Health Plan, and Pacificare. Kaiser Permanente dropped out of the demonstration in January 1986 because of cost considerations. Pacificare participates in HealthChoice but also continues to market and directly enroll beneficiaries from the Medicare population. No other new Tax Equity and Fiscal Responsibility Act (TEFRA) plans have been identified in the Portland area. Both Blue Cross/Blue Shield and Physician InterHospital Health Plan have expressed their intent to obtain TEFRA qualification in the near future. The enrollments generated through HealthChoice as of July 1986 are: Kaiser, 1,099; Blue Cross/Blue Shield of Oregon, 4,532; Physician InterHospital Health Plan, 1,386; and Pacificare, 492.

Medicare Competition Demonstration

Project No.: 500-82-0040
Period: September 1982 - June 1987
Award: Contract
Contractor: Senior Health Plan
Atrium Building, Suite 220
1295 Bandana Boulevard, North
St. Paul, Minn. 55108
Project Officer: John Sirmon
Division of Health Systems and Special Studies

Description: This project involves the formation and testing of a new entity, a joint venture between St. Paul-Ramsey Medical Center, Amherst H. Wilder Foundation, and Health Central, Inc. This consortium will provide comprehensive medical and institutional services to an enrolled population, and will provide benefits additional to the standard Medicare package. Extensive use of cost sharing is proposed to control utilization. The Health Care Financing Administration (HCFA) incorporated a modification to the standard adjusted average per capita cost (AAPCC) reimbursement method. Prior hospital utilization and Medicare Part B utilization are used in conjunction with current AAPCC factors to derive prospective rates for each plan member.

Status: Senior Health Plan (SHP) has completed and met all developmental requirements regarding participation as a Medicare health maintenance organization demonstration (e.g., protocol and marketing materials). SHP has received waiver and service agreement approval from HCFA and is operational. SHP will operate under a Medicare/private sector membership ratio system that will assure the plan's compliance with the membership mix (50/50) requirements of the Tax Equity and Fiscal Responsibility Act of 1982. Current Medicare enrollment is 4,900. Brandeis University is the evaluator for this demonstration and is currently analyzing the first-year operational data. Initial reports are expected to HCFA in Fall 1986. These reports will include a case study of the demonstation and an analysis of the "prior use" reimbursement, including a comparison to the standard AAPCC method.

Medicare Competition Demonstration

Project No.: 500-84-0050
Period: August 1984 - August 1989
Award: Contract
Contractor: AmeriMed
303 Glenoaks Boulevard
Suite 900
Burbank, Calif. 91502
Project Officer: Ronald Deacon
Division of Health Systems and Special Studies

Description: The purpose of this project is to test innovative alternatives to existing practices of financing and delivering health care to Medicare beneficiaries under competitive market conditions. As a group-model health maintenance organization, the demonstration will test how quality care can be provided to Medicare beneficiaries under a competitive delivery system at a reduced cost to the Government (85 percent of the adjusted average per capita cost) and to the Medicare beneficiary.

Status: The final protocol was submitted by AmeriMed in September 1985. It was anticipated that the design and development stage would be completed in time for operations to commence in 1987. The start of the project was delayed until AmeriMed could meet the Medicare health maintenance organization mix requirement of not having less than 50 percent private enrollment. Because AmeriMed and the Health Care Financing Administration could not reach agreement on the terms of the demonstration, the contract was terminated.

Senior Group Health Plan Waiver-Only Medicare Competition Demonstration Program

Project No.: 95-C-98625/4-03
Period: October 1984 - September 1988
Award: Cooperative Agreement
Awardee: Finlay Medical Centers HMO Corporation
1401 Brickell Avenue, Suite 603
Miami, Fla. 33131
Project Officer: Ronald Deacon
Division of Health Systems and Special Studies

Description: Finlay Medical Centers HMO Corporation received a waiver-only cooperative agreement award on October 1, 1984, renewable on an annual basis for 4 years. Finlay is a staff-model health maintenance organization (HMO) that is State-qualified and has implemented a risk capitation at 85 percent of the adjusted average per capita cost (AAPCC) in Dade and Broward Counties in Florida. Finlay offers prescription drugs, eye examinations and glasses, hearing examinations and aids, and a dental plan at no premium to the Medicare enrollees. It competes with several Tax Equity and Fiscal Responsibility Act HMO's in the Miami market that receive payment at 95 percent of the AAPCC.

Status: Finlay submitted its draft protocol with marketing materials in November 1984. Marketing began February 1, 1985, and enrollment began March 1, 1985, with membership reaching 5,900 Medicare beneficiaries by September 1986.

Evaluation of the Medicare Competition Demonstrations

Project No.: 500-83-0047
Period: October 1983 - June 1988
Funding: $ 3,797,219
Award: Contract
Contractor: Mathematica Policy Research, Inc.
Suite 550
600 Maryland Avenue, SW.
Washington D.C. 20024
Project Officer: James Hadley
Division of Health Systems and Special Studies

Description: The Health Care Financing Administration is sponsoring an evaluation of a major series of demonstrations, designed to introduce significant competition into the market for providing health services to Medicare beneficiaries. The evaluation focuses on 20 health maintenance organizations (HMO's) and other competitive medical plans (CMP's) throughout the United States that provide health services to Medicare beneficiaries for a prospectively determined payment. These sites originally started as demonstrations, but they continued to serve Medicare beneficiaries under the Tax Equity and Fiscal Responsibility Act of 1982. This evaluation focuses on the following major policy issues:

- What are the impacts of enrollment of Medicare beneficiaries by HMO's and CMP's under risk-based capitation on the use, quality, and cost of care?
- What are the determinants of consumer choice of HMO's and CMP's? What marketing strategies are pursued by HMO's and CMP's?
- Does biased selection occur, and if so, what is its nature and extent?

Status: The evaluation began in October 1983. Reports on the implementation of the demonstations, the decision of the HMO's and CMP's to enter the market, the initial use and cost experience of the plans, and variables predicting beneficiary enrollment and disenrollment are currently available. Reports on quality assurance mechanisms in the plans, beneficiary satisfaction, biased selection, and the process of care will become available during 1987. A final use and cost analysis based on individual-level beneficiary data will be completed during Summer 1988.

Evaluation of Medicare Health Maintenance Organization Demonstration Projects

Funding: Intramural
Project Officers: Judith D. Kasper and Alan S. Friedlob
Division of Beneficiary Studies and
Division of Long-Term Care Experimentation

Description: This study evaluates demonstration projects undertaken to encourage health maintenance organizations (HMO's) to participate in the Medicare program under a risk mechanism. Three demonstration HMO's are included in the study: the Fallon Community Health Plan, the Greater Marshfield Community Health Plan, and the Kaiser-Permanente Medical Program of Portland, Oreg. The study includes 18,085 aged Medicare beneficiaries who had enrolled in the plans as of April 1981. Also included are comparison groups from a 5-percent random sample of aged Medicare beneficiaries living in the same geographic areas as the control groups. The evaluation examines issues such as biased selection, patterns of prior and post-enrollment use by HMO enrollees, and comparisons of use and expenditure patterns by HMO and non-HMO beneficiaries. The distribution of principal diagnoses and surgical procedures between enrollee and comparison groups will also be examined for the Marshfield and Fallon sites; this will provide information on enrollment selection bias as well as differences in patterns of care post-enrollment.

Status: Two working papers are available from this study: "The Use and Costs of Services for Medicare Beneficiaries in Capitated Systems," by Judith Kasper and Jeffrey McCombs, 1985, and "Beneficiaries in Capitated Systems: Multivariate Analysis," by Jeffrey McCombs, Judith Kasper, and Gerald Riley, 1986. Additional studies will be completed in 1987 and will include the Kaiser experience.

Santa Barbara Health Initiative

Project No.: 11-C-98036/9-04
Period: September 1981 - December 1986
Funding: $ 330,572
Award: Cooperative Agreement
Awardee: California Department of Health Services
714-744 P Street
Sacramento, Calif. 95814
Project Officer: Ronald Deacon
Division of Health Systems and Special Studies

Description: The Santa Barbara Health Initiative (SBHI), a county demonstration project, developed and implemented a primary care network to serve Medi-Cal eligibles residing within Santa Barbara County. The Health Authority (HA), an administrative body established by the county, has contracted with the State for administration and with providers for service delivery. HA has signed contracts with 432 out of the 560 physicians in the county. The Health Care Financing Administration (HCFA) and the State reimburse SBHI a prospective amount based on 95 percent of fee-for-service costs. At the county level, an account is credited for each contracting primary care physician. HA pays physicians 80 percent of the estimated cost of services per person, with the remaining 20 percent placed into a reserve account. Out of this reserve is deducted administrative overhead, a 2-percent separate risk reserve, and any surplus which, at the end of the year, is distributed to the participating primary care physicians. Hospital payment is based on Medi-Cal experience, with prospective rates set for hospitals as all-inclusive payments per Medi-Cal hospital day. Monthly advance payments are made to hospitals calculated at 50 percent of expenditures. Eight hospitals have signed formal contracts with HA.

Status: Service delivery began on September 1, 1983, under waivers from HCFA and State enabling legislation. Approximately 22,000 beneficiaries in the county were enrolled in the program. After its first operational year, the demonstration was successful as the county was able to provide the full range of services to Medi-Cal beneficiaries and distribute a 3-percent surplus to its primary care physicians. Preliminary utilization data indicate patterns of care are shifting in a more cost-conscious direction as a result of the program. SBHI is included in the evaluation conducted by the Research Triangle Institute. The demonstration waivers will end in December 1986, at which time the project is scheduled to convert to Section 1915(b) program status, under Public Law 97-35, the Omnibus Budget Reconciliation Act of 1981.

Florida Alternative Health Plan Project

Project No.: 11-C-98231/4-03
Period: June 1982 - December 1986
Funding: $ 729,114
Award: Cooperative Agreement
Awardee: State of Florida
1317 Winewood Boulevard
Tallahassee, Fla. 32301
Project Officer: Ronald Deacon
Division of Health Systems and Special Studies

Description: This project is designed to demonstrate and test a number of methods for promoting competition among health care providers and insurers. The competitive models include:

- Competitive alternative health plans (competitive procurement process).
- Recipient case management (case management focused on overutilizers).
- Alternative health plan for the frail elderly (risk contracts with organizations to provide health, home, and community-based services on a prepaid basis).
- Medical care vouchers (consumer choice model utilizing nonnegotiable vouchers).

Status: Two health maintenance organizations in Dade County responded to the competitive bid model, but the State did not proceed through the procurement process because of a protest filed by one bidder. The State has decided to contract with health maintenance organizations through individual negotiation rather than competitive bidding. Three different organizational models for recipient case management were to be tested in Jacksonville, Tampa, and Orlando. One model in Tampa is operational. In June 1985, the State withdrew its Section 1115 waiver for the case-management model and will continue operation under the existing Medicaid plan. A final protocol for the frail-elderly module was submitted in September 1986. Implementation is scheduled for February 1987. The State is not planning to submit a protocol for the voucher model.

Minnesota Prepaid Medicaid Demonstration

Project No.:	11-C-98223/5-04
Period:	June 1982 - December 1988
Funding:	$ 349,421
Award:	Cooperative Agreement
Awardee:	Minnesota Department of Public Welfare 2nd Floor-Space Center 444 Lafayette Road St. Paul, Minn. 55101
Project Officer:	Ronald Deacon Division of Health Systems and Special Studies

Description: Minnesota was awarded a grant to develop a prepaid capitation demonstration project for the eligible Medicaid population in three countries: one urban, Hennepin; one suburban, Dakota; and one rural, Itasca. For all counties, the per capita payment will be calculated based on the average fee-for-service cost per eligible in the program in each county. This rate will be paid to competing health plans who organize to provide services to Medicaid recipients within the urban and suburban counties. A rate-cell approach is being used to pay capitation rates. The cells incorporate adjustments for age, sex, category of eligibility, county of residence, and institutional and Medicare status. The capitation rate to plans for Aid to Families with Dependent Children (AFDC) recipients will be 90 percent of the fee-for-service costs. For Supplemental Security Income (SSI) recipients, the rate will be 95 percent of the fee-for-service costs. Both rates include loss-sharing provisions with Medicaid health plans up to 100 percent of the fee-for-service costs in the worst-case scenarios. As the project is intended to demonstrate the shifting of financial risk from the State and the Health Care Financing Administration (HCFA) to the Medicaid health plans, this aggregate loss sharing will be phased out over the 3-year implementation period. The demonstration plans to enroll the AFDC, Aged, Blind and Disabled, including mentally retarded and mentally ill populations, in prepaid health plan arrangements. In Hennepin County, an experimental group consisting of 35 percent of the Medicaid population will be randomly selected to participate in the project. In Dakota County, the mental health/chemical dependency portion of the rate will be broken out and paid separately to the county. The county has chosen to bear both the risk and responsibility of providing these services. The rural county will not have competing plans. The capitation will go to the county who has contracted with Health Maintenance Organization (HMO) of Minnesota for claims processing and management services. HMO of Minnesota will coordinate the case management and utilization controls and supervise local providers in delivering services to the Medicaid population.

Status: The State submitted an operational protocol that was approved by HCFA in September 1985. The project began the implementation phase in Itasca County in September 1985 and in Hennepin and Dakota Counties in December 1985. There are presently seven participating competing plans in Hennepin and Dakota Counties. Initial enrollment has been slower than anticipated because of failure of recipients to make choices (30-percent assignment rate); however, enrollment is expected to reach 30,000 recipients by December 1986. This project is included in the evaluation conducted by the Research Triangle Institute.

Arizona Health Care Cost-Containment System

Project No.: 11-P-98239/9-03
Period: June 1982 - June 1987
Award: Grant
Grantee: AHCCCS Administration
124 West Thomas
Phoenix, Ariz. 85013
Project Officer: Sidney Trieger
Division of Health Systems and Special Studies

Description: This project is designed to test the effectiveness of establishing under the Social Security Act, Title XIX, a Medicaid program based on competitive principles, including primary care physicians acting as gatekeepers, prepaid capitated contracts, competitive bidding, the use of nominal copayments, limited restrictions on freedom of choice, and capitated payment by the Health Care Financing Administration (HCFA). The Arizona Health Care Cost-Containment System (AHCCCS) was implemented October 1, 1982, as a 3-year demonstration.

Status: The State was granted a 2-year extension to the AHCCCS demonstration on July 29, 1985. During the fourth and fifth year, the capitation rate methodology was changed and will be set at the lower of either 95 percent of the estimated actuarial fee-for-service costs or HCFA's payment for the third year inflated by an appropriate factor. On August 12, 1985, the State announced that it had awarded contracts to 20 prepaid health plans for the fourth year of the AHCCCS demonstration beginning on October 1, 1985. An open enrollment period was held from August 19, 1985, to September 1, 1985, to allow recipients to change plans. During the fifth year, AHCCCS renewed its contracting with most of the existing prepaid plans. The open enrollment period was held from August 19, 1986, to September 8, 1986.

Evaluation of the Arizona Health Care Cost-Containment System

Project No.: 500-83-0027
Period: June 1983 - March 1987
Funding: $ 2,489,488
Award: Contract
Contractor: SRI International, Inc.
333 Ravenswood Avenue
Menlo Park, Calif. 94025
Project Officer: Paul Lichtenstein
Division of Health Systems and Special Studies

Description: This project will evaluate the implementation, operation, and impact of the Arizona Health Care Cost-Containment System (AHCCCS), which is a unique and innovative State-sponsored demonstration that provides public assistance medical care (medical assistance) to residents of Arizona who are eligible for Aid to Families with Dependent Children and Supplemental Security Income cash payments. The study will focus on measuring the effects of AHCCCS on cost, quality, and utilization of health care as well as issues related to patient access and satisfaction. The following major innovative cost-containment methods, which are unique to Arizona among all State Medicaid Programs, will be evaluated:

- Capitation prepayment contracts, awarded as a result of competitive bidding, to health care plans that provide or arrange for the provision of covered services.
- "Gatekeeping" by a primary care physician who will be responsible for either providing or authorizing the services to be reimbursed for the enrollees, including any services provided by specialists.
- Use of nominal copayments as a means of inhibiting unnecessary utilization.
- Restriction on freedom of choice of plans and providers.
- Capitated payment of Federal financial participation by the Health Care Financing Administration to the State of Arizona based on the number of enrollees.

Status: To date, SRI has produced the following documents:

- A literature review on the major study topics and the methodologies for their evaluation.
- An evaluation plan that details the issues to be addressed by the study and the methodological approaches to be utilized.
- A case study which describes the events that occurred during the first 18 months of the AHCCCS program operation.
- A report on the cost of AHCCCS during the first 2 years of the program compared with the cost of traditional Medicaid programs.

Missouri Medicaid Prepaid Health Demonstration Project

Project No.:	11-C-98225/7-04
Period:	June 1982 - December 1986
Funding:	$ 337,084
Award:	Cooperative Agreement
Awardee:	Missouri Department of Social Services P.O. Box 88 Jefferson City, Mo. 65103
Project Officer:	Ronald Deacon Division of Health Systems and Special Studies

Description: Missouri has implemented a citywide, consumer-choice model characterized by the use of various incentives, different marketing techniques, and the offering of a range of alternative health plans (AHP's). Missouri mandatorily enrolled approximately 23,000 Aid to Families with Dependent Children (AFDC) eligibles in the Kansas City area under five AHP contracts or contracting physician sponsors. The project incorporates many of the components of competitive systems, including: consumer choice among AHP's; risk-sharing based on capitated reimbursements; a variety of marketing incentives; and participation of a range of organizational types. All participating plans offer at least the mandatory minimum benefit package for the categorically needy under the prepaid arrangement. Enrollment is limited to the AFDC population. Marketing has taken place in the welfare offices, focusing on a slide presentation and standardized written materials. The data to be collected under the demonstration include: site-specific utilization data; State fee-for-service utilization and expenditure data (already collected monthly under the State Medicaid Management Information System); and consumer awareness and satisfaction data (collected through recipient surveys). Missouri has set its base rate of payment to AHP's at approximately 90 percent of fee-for-service costs. The base rate is augmented approximately 5 percent through risk-reduction mechanisms.

Status: The State has contracts with 5 prepaid health plans and 57 physician sponsors to participate in the program. The plans include Swope Parkway Comprehensive and Mental Health Center, Total Health Care/Prevention Plus, Truman Medical Center, University of Health Sciences, and Wayne Miner Health Center, Inc. The providers started delivering services on January 5, 1984, and the first payment under the managed health care program was made on January 20, 1984. Enrollment, as of June 30, 1986, was approximately 23,000. About 85 percent of the enrollees are in prepaid plans and 15 percent in the physician-sponsor program. This project is included in the evaluation conducted by the Research Triangle Institute. The demonstration waivers will end in December 1986, at which time the project is scheduled to convert to Section 1915(b) program status, under Public Law 97-35, the Omnibus Budget Reconciliation Act of 1981.

New Jersey Medicaid Personal Physician Plan

Project No.: 11-C-98222/2-04
Period: June 1982 - June 1987
Funding: $ 609,429
Award: Cooperative Agreement
Awardee: New Jersey Department of Human Services
324 East State Street
Trenton, N.J. 08625
Project Officer: Ronald Deacon
Division of Health Systems and Special Studies

Description: The demonstration involves implementation of a broker/case manager model. It allows, on a voluntary participation basis for Medicaid eligibles and providers, eligibles to select a provider as a case manager for 6-month intervals. These managers are responsible for all direct primary care delivery, referrals, and ancillary services for noninstitutional recipients. Case managers are reimbursed on a capitation basis and are at risk for all noninstitutional services. Capitation rates are adjusted for county of residence, sex, age, and eligibility category of the enrolled eligibles. The State had contracts with the area Professional Standards Review Organizations (PSRO's), which acted as broker organizations. The PSRO enrolled case managers and eligibles and was responsible for marketing, grievance systems, and quality-of-care monitoring. These duties have since reverted to the State. Participating eligibles select their case managers from a list provided by the broker and remain enrolled with the selected case manager for 6 months. Eligibles are, however, able to change their case managers in the first month. Providers must be directly or indirectly accessible on a 24-hour basis. The other principal subcontract was with LaJolla Management Corporation to provide assistance in major areas of developmental work, such as design of the Medicaid Management Information System and the quality-assurance system.

Status: The plan was originally to be phased in throughout the State. Phase I implemented only the ambulatory services component and occurred in three northern, rural counties in the second year of the demonstration, from July 1, 1983, to June 30, 1984. Enrollment during this phase was minimal, as there were less than 50 current enrollees in these counties. Phase II implemented both the ambulatory and inpatient components in five additional counties and the inpatient component in Phase I counties. This phase occurred between July 1, 1984, and June 30, 1985. Enrollment during this phase was more successful, as approximately 5,000 were enrolled. The out-of-phase project, referred to as the pilot county phase, began on December 1, 1984, in three counties: Essex, Passaic, and Union. New Jersey was not prepared to go into these large counties full scale; the pilot project allowed the State to test the market area and develop systems with the county welfare agencies on a smaller scale. The pilot gave the State a better idea of how the plan would operate in these high Medicaid areas once the demonstration was fully implemented. The State has presently enrolled 4,500 enrollees in these pilot counties. The demonstration waivers will end in June 1987. This project is included in the evaluation conducted by the Research Triangle Institute.

Monroe County MediCap Plan

Project No.:	11-C-98230/2-03
Period:	June 1982 - April 1988
Funding:	$ 700,322
Award:	Cooperative Agreement
Awardee:	New York Department of Social Services 40 North Pearl Street Albany, N.Y. 12243
Project Officer:	Nancy Row Division of Health Systems and Special Studies

Description: Monroe County and New York State are participating in a reimbursement demonstration involving a prepaid capitated rate for Medicaid clients involved in the MediCap plan. All clients are required to select a provider from a large set of providers, most of whom have arranged to provide services through Rochester Health Network (RHN), a health maintenance organization (HMO). For the first 15 months, RHN was the only HMO. Genesse Valley Group Health Association began enrolling a limited number of clients September 1986. Initially, MediCap will enroll the Aid to Families with Dependent Children (AFDC) and home relief population (42,000) and then phase in the medical assistance and foster care eligibles (7,500). Supplemental Security Income and the disabled are the last group of eligibles to be phased in. The county is reimbursed a capitated rate equal to 95 percent of fee-for-service costs. The county has, in turn, developed rates for categories of eligibles which it pays Rochester Health Network and Genesse Valley Group Health Association.

Status: This project began enrollment in July 1985. All 4,700 AFDC and home relief eligibles were expected to be enrolled by August 1986. Enrollment plans for the remaining categories have not been agreed on by the county, State, and the Health Care Financing Administration.

Competitive Managed Health Plans for AFDC Medicaid Recipients

Project No.: 11-P-98330/1-03
Period: March 1983 - June 1986
Award: Grant
Grantee: Massachusetts Department of Public Welfare
600 Washington Street
Boston, Mass. 02111
Project Officer: Marla Aron
Division of Health Systems and Special Studies

Description: This project is designed to demonstrate and evaluate five models of "managed health care," developed by the Massachusetts Medicaid program for recipients of Aid to Families with Dependent Children (AFDC), in terms of cost, utilization, consumer satisfaction, administration, and quality of care. The five models are: case management, health maintenance organizations (HMO's), ambulatory capitation, capitated dental program, and fiscal intermediary.

Status: All five models were tested during the demonstration. The case-management model served approximately 5,000 recipients, the HMO's served approximately 3,000 recipients, the ambulatory-capitation model served approximately 1,000 recipients, the dental-capitation model served approximately 1,000 recipients, and the fiscal-intermediary model served approximately 400 recipients. A 6-month guaranteed eligibility and a cash incentive for recipient participation was tested during the third grant year. Different marketing strategies for increasing provider and recipient participation are being evaluated. As part of a larger evaluation project, Brandeis University completed an evaluation of this project in February 1986. An evaluation report from project staff is expected in December 1986.

Evaluation of the Medicaid Competition Demonstrations

Project No.: 500-83-0050
Period: September 1983 - September 1987
Funding: $ 3,098,938
Award: Contract
Contractor: Research Triangle Institute
P.O. Box 12194
Research Triangle Park, N.C. 27709
Project Officer: Spike Duzor
Division of Health Systems and Special Studies

Description: Medicaid demonstrations are being implemented in six States (California, Florida, Minnesota, Missouri, New Jersey, and New York) to enhance the role of competition in the delivery of publicly financed Medicaid services. The evaluation is designed to describe and analyze the separate demonstrations, as well as to conduct a comparative impact analysis across the projects. A series of case studies and analytical reports will be done, highlighting the impact of the demonstrations' cost-containment modalities and their subsequent effect on quality of care, patient utilization, and patient satisfaction.

Status: Detailed second-year case studies highlighting the status of each demonstration are currently available. A finalized research design, a data collection plan, and primary data collection instruments are also available. A final evaluation report should be completed by Fall 1987.

Health Maintenance Organization Studies

Adjusted Average Per Capita Cost

Funding: Brandeis University Health Policy Research Consortium
(See page 172)
Project Officer: James Lubitz
Division of Beneficiary Studies

Description: The Brandeis University Health Policy Research Consortium, as part of its grant, is studying ways to improve the current adjusted average per capita cost (AAPCC). The work has been focused on four areas:

- The use of prior utilization to predict future utilization.
- The use of indicators of disability in the AAPCC.
- Analysis of partial capitation and reinsurance for Medicare health maintenance organizations (HMO's).
- Geographic variations in the AAPCC.

Status: Prior utilization--Results indicate that prior utilization is a significant predictor of future utilization. The predictive power is improved when prior hospital stays are classified into those for self-limiting conditions and those for conditions, like cancer, indicative of chronic, recurring problems. Work is continuing to refine an AAPCC model incorporating diagnostic information on prior hospital stays. A final report entitled "An Analysis of Alternative AAPCC Models Using Data From the Medicare History File" is expected to be available in 1987.

Disability level--Results indicate that disability level is a significant predictor of health care use. A disability level factor, therefore, would theoretically improve the current AAPCC. However, any improvement would have to be weighed against the cost and administrative burden of acquiring disability data on Medicare enrollees. A disability adjustment to the AAPCC is discussed in a report entitled "Incorporating Disability Status in the AAPCC" which is expected to be available in 1987.

Partial capitation—Work has been completed on a number of reinsurance models. They are discussed in "Analysis of Alternative Partial Capitation Models for the AAPCC" by Christopher Tompkins and Leonard Gruenberg, available from Brandeis University.

Geographic variations—Average Medicare per county reimbursements, which are the basis of the AAPCC, vary dramatically by county. Work has begun to examine what variation may be an appropriate reflection of input costs or morbidity and what might reflect oversupply of providers or inappropriate patterns of practice.

An Analysis of Long-Run Rate-Setting Strategies for Risk-Based Contracting Under Medicare

Project No.: 18-C-98737/3-01
Period: September 1985 - September 1987
Funding: $ 360,081
Award: Cooperative Agreement
Awardee: Virginia Commonwealth University
1012 East Marshall Street
Richmond, Va. 23298-0001
Project Officer: James Beebe
Division of Beneficiary Studies

Description: This study will develop a model of the Medicare market as a submarket interacting with the entire market for health services to study geographic variation in the adjusted average per capita cost (AAPCC). The model will be used to analyze four different payment strategies for captitation under Medicare:

- Competitive bidding. The study will look at the feasibility of conducting competitive bidding in different geographic areas.
- Vouchers. What are the cost implications of different voucher schemes?
- Blended sector rates. How can health maintenance organization (HMO) payment rates be set in areas of high HMO penetration?
- Rates tied to non-Medicare prices.

An analysis will be conducted to determine if Medicare payment rates can be related to the health market as a whole.

Status: Literature review and data collection are complete. Analysis of data has begun.

Determination of Health Maintenance Organization Capitation Rates for Medicare Beneficiaries

Project No.: 18-P-98804/9-01
Period: September 1985 - September 1988
Funding: $ 972,467
Award: Grant
Grantee: Kaiser Foundation Research Institute
3505 Broadway, Suite 1112
Oakland, Calif. 94611
Project Officer: Gerald Riley
Division of Beneficiary Studies

Description: The project investigates the issues of biased selection into health maintenance organizations (HMO's) and the problem of developing a risk-adjustment methodology for HMO payments by using both internal Kaiser data and data from the Medicare Statistical System. The investigator's specific aims are as follows:

- To predict health care costs for groups of stayers and switchers in fee for service (FFS) and an HMO (Kaiser), and to estimate the degree of selection bias, if any, among HMO enrollees.

- To simulate Medicare capitation rates for an HMO using alternative risk-adjustment methods and compare them with the current adjusted average per capita cost rate.

- To develop and test a risk-adjustment methodology employing cause-specific mortality and hospital morbidity for predicting aggregate use of medical care services in future years by Medicare beneficiaries enrolled in an HMO.

- To examine the implications of a separate reinsurance program for case-specific expenses above a specified level of alternative risk-adjusted capitation methods.

- To develop a risk-adjustment methodology by using ambulatory morbidity and self-perceived health status for predicting future aggregate use of medical care services by Medicare beneficiaries enrolled in an HMO.

Status: The project is entering its second year. Most Medicare data and internal Kaiser data needed for the project have been obtained and analysis files are being constructed. Analysis plans are being refined with the assistance of a consultant panel.

Former Disability as an Adjustment Factor for the Adjusted Average Per Capita Cost

Funding: Intramural
Project Director: Gerald Riley
Division of Beneficiary Studies

Description: Medicare data show that approximately 8 percent of Medicare beneficiaries 65-69 years of age were formerly entitled to Medicare because of disability. These beneficiaries tend to incur nearly twice as much reimbursement as other beneficiaries their age. Consequently, the Office of Research will develop and test an additional factor for the adjusted average per capita cost that will adjust for previous receipt of Social Security disability benefits among aged enrollees. Included in the study will be beneficiaries who were formerly entitled to disability benefits under Social Security, but were never Medicare entitled.

Status: Identifying beneficiaries who were formerly entitled to disability benefits under Social Security, but were not Medicare entitled, has required much effort. The Office of Research recently obtained access to a Social Security Administration file that contains information on workers entitled to disability benefits after January 1, 1964. Exploratory analyses will be conducted on this file to determine whether it meets the needs of this project. If so, it will be linked to Medicare utilization files to analyze Medicare use by former disability status.

Medicare Reimbursement Regression to the Mean

Funding: Intramural
Project Director: James Beebe
Division of Beneficiary Studies

Description: Several recent studies have shown that persons who join health maintenance organizations (HMO's) tend to be lower users of health care services prior to joining than the general population. This suggests that they may be healthier. If so, the current payment method will overpay HMO's. Critics of the studies claim that the problem is overstated because any group of high or low users will become average users (regress to the mean) over a period of time. This study is intended to measure the extent to which high- and low-use Medicare beneficiaries regress to the mean and to explore whether these measures can be useful in setting capitation payments for HMO's.

Status: Data files have been formed and analysis is nearly completed. A draft paper has been prepared. Preliminary results show a variety of patterns of regression to the mean, each with different implications for HMO payment.

Trends in Health Maintenance Organization (HMO) Enrollment by Medicare Beneficiaries

Funding: Intramural
Project Officer: Alma McMillan
Division of Beneficiary Studies

Description: Direct Federal involvement in at-risk HMO's did not come until the Social Security Amendments of 1972, but few entered into agreements to enroll Medicare beneficiaries. More recently, policies governing payments to HMO's under Public Law 97-248, the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), have supported and stimulated the efforts to increase the enrollment of Medicare beneficiaries in HMO's. The major objective of this study is to examine trends and patterns of Medicare HMO enrollment by demographic and HMO characteristics. The basic study design will be a comparison of HMO to fee-for-service enrollees and comparisons among HMO's on selected characteristics. The study will look at enrollment by age, sex, institutional status, and welfare status, to determine the proportion of high-risk enrollees (e.g., the aged, the institutionalized) in HMO's. The proportion of aged Medicare enrollees who were formerly entitled to Medicare under age 65 because of disability and mortality rates will be compared in HMO's and fee-for-service population.

Status: Most of the plans for data processing requirements have been completed and data production activities are proceeding. Preliminary investigation shows that since April 1985, when the first TEFRA contract was signed, there has been large growth in Medicare enrollment in HMO's. As of September 30, 1986, there were 184 TEFRA HMO's with more than 875,000 Medicare enrollees. More than one-half of the enrollees (60 percent) are in Florida, California, and Minnesota. One-half of the TEFRA HMO's were independent practice associations (IPA's) and they accounted for two-fifths of Medicare HMO enrollment.

Report to Congress: Medicaid Health Maintenance Organization Disenrollment

Funding: Intramural
Project Director: Gerald S. Adler
Division of Beneficiary Studies

Description: The Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35) mandates the Secretary to conduct a study of the extent of and reasons for Medicaid recipients' disenrollment from health maintenance organizations. This study presents data from three States: California, Massachusetts, and Wisconsin.

Status: The report is undergoing review in the Department of Health and Human Services.

Social Health Maintenance Organizations

Social Health Maintenance Organization Project for Long-Term Care

Project No.: 18-C-97604/1-06
Period: March 1980 - August 1986
Funding: $ 1,564,978
Award: Cooperative Agreement
Awardee: Brandeis University
Health Policy Center
415 South Street
Waltham, Mass. 02254
Project Officers: J. Donald Sherwood and Sidney Trieger
Division of Long-Term Care Experimentation and
Division of Health Systems and Special Studies

Description: In accordance with the congressional mandate (Public Law 98-369, Section 2355), this project developed and is currently implementing the concept of a social health maintenance organization (S/HMO) for long-term care. A S/HMO integrates health and social services under the direct financial management of the provider of services. All services are provided by or through the S/HMO at a fixed annual prepaid capitation sum.

Status: Four S/HMO demonstration sites have been selected by the Health Policy Center. These sites include two HMO types that add long-term care services to their service packages and two long-term care providers that add acute care services to their service packages. The Center and the sites have developed a common service package, financing plans, and risk-sharing arrangements. The demonstration sites utilize Medicare and Medicaid waivers. All four sites had initiated service delivery by March 1985. During the first year, the sites concentrated their efforts on marketing and enrollment in order to reach an effective level to substain their operations. The demonstration will continue through August 1988. The S/HMO sites are:

- Elderplan, Inc.
  Sponsor: Metropolitan Jewish Geriatric Center
  Brooklyn, New York
  Project Officer: William D. Clark

- Seniors Plus
  Sponsors: Group Health Inc. and Ebenezer Society
  Minneapolis, Minnesota
  Project Officer: John Sirmon

- Medicare Plus II
  Sponsor: Kaiser-Permanente Medical Care Program
  Portland, Oregon
  Project Officer: John Sirmon

- Senior Care Action Network Health Plan
  Sponsor: Senior Care Action Network
  Long Beach, California
  Project Officer: William D. Clark

A draft report was received in September 1986. A final report is expected January 1987. The following publications have been produced:

- "The SHMO: A professional and organization challenge," In Reshaping Health Care for the Elderly, Carl Eisdorfer, Ed., Baltimore, Maryland, Johns Hopkins University Press, Forthcoming.

- "Long-term care insurance: Will it sell?" Business and Health, November 1986.

- "The social health maintenance organization and long-term care," Generations, Vol. 9, No. 4 , Summer 1985.

- "The national social health maintenance organization demonstration," Journal of Ambulatory Care Management, Vol. 8, No. 4, September 1985.

- "The social health maintenance organization: A vertically integrated prepaid care delivery system for the elderly," Health Care Financial Management, Vol. 38, No. 10, October 1984.

- "The social health maintenance organization and its role in reforming the long-term care delivery system," Conference Proceedings: Long-Term Care Financing and Delivery Systems: Exploring Some Alternatives, HCFA Pub. No. 03174, Washington, U.S. Government Printing Office, June 1984.

- Changing Health Care for the Aging Society: Planning for the Social Health Maintenance Organization, Lexington, Maine, Lexington Books, 1985.

- "Functional Assessment: Achieving and Maintaining Inter-Rater Reliability in Multi-Site Long-Term Care Demonstration Programs: An Example from the Consortium of Social/HMO's."

Evaluation of Social Health Maintenance Organization Demonstrations

Project No.: 500-85-0042
Period: September 1985 - December 1989
Funding: $ 2,388,622
Award: Contract
Contractor: University of California, San Francisco
Aging Health Policy Center
San Francisco, Calif. 94143
Project Officer: Alan S. Friedlob
Division of Long-Term Care Experimentation

Description: The social health maintenance organization (S/HMO) seeks to enroll voluntarily, persons 65 years of age or over in an innovative prepaid program that integrates medical, social, and long-term care delivery systems. The S/HMO merges the health maintenance organization concepts of capitation financing and provider risk-sharing developed by the Health Care Financing Administration (HCFA) under its Medicare capitation and competition demonstrations with the case-management and support services concepts underlying Department of Health and Human Services' (DHHS) sponsored long-term care demonstrations serving the chronically ill aged. Evaluation results will be transmitted to Congress (mandated by Public Law 98-369) and will be used by HCFA and DHHS to assess whether the S/HMO concept should be fostered through changes in prepaid Medicare contracting regulations.

Status: This contract was awarded in September 1985. Interim results will be available in Fall 1987.

Health Care Plus: The Lutheran Medical Center Program for Prepaid Managed Health Care

Project No.: 11-P-98716/2-02
Period: August 1985 - June 1989
Award: Grant
Grantee: New York State Department of Social Services
40 North Pearl Street
Albany, N.Y. 12243
Project Officer: John F. Meitl
Division of Health Systems and Special Studies

Description: This is 1 of 13 program sites funded under the Robert Wood Johnson Foundation/Health Care Financing Administration (HCFA) program for prepaid managed health care. The program is cosponsored by the National Governors' Association. It is designed to enable medical institutions, working with State and Federal Governments and private health insurers, to develop more efficient arrangements for the financing and delivery of health services. This is a Medicaid project that will utilize prospective payment and case management and will offer 6 months of guaranteed eligibility as a participation incentive. The Lutheran Medical Center is a teaching hospital that serves the residents of the Sunset Park neighborhood of Southwest Brooklyn, N.Y.

Status: All of the first-year special terms and conditions were satisfied, and the State was notified in April 1986 that the waivers could be implemented. Prior to implementation, the State requested that the service area be expanded by two additional zip codes. HCFA approved this request in May 1986, and the State implemented the waivers on July 1, 1986. A continuation application was received for the second year of the demonstration in July 1986. The project was extended for the second period from August 1986 through July 1987. New York is participating in the partial randomization evaluation design that is being conducted by the Rand Corporation.

Program for Prepaid Managed Health Care

Project No.: 11-P-98715/3-02
Period: August 1985 - July 1988
Award: Grant
Grantee: Maryland Department of Health and Mental Hygiene
201 West Preston Street
Baltimore, Md. 21201
Project Officer: John F. Meitl
Division of Health Systems and Special Studies

Description: This project contains 2 of the 13 program sites funded under the Robert Wood Johnson Foundation/Health Care Financing Administration (HCFA) program for prepaid managed health care. The program is cosponsored by the National Governors' Association. It is designed to enable medical institutions, working with State and Federal Governments and private health insurers, to develop more efficient arrangements for the financing and delivery of health services. This is a Medicaid project that will utilize prospective payment and case management and will offer 12 months of guaranteed eligibility as a participation incentive. The two sites are the Chesapeake Health Plan (CHP) and the Johns Hopkins Health Plan (JHHP), both in Baltimore, Maryland.

Status: All of the first-year special terms and conditions were satisfied, and the State was notified in January 1986 that the waivers could go into effect. Enrollment with the 12 months of guaranteed eligibility began at JHHP in February 1986 and at CHP in March 1986. The request for the second year of the demonstration from August 1, 1986, through July 31, 1987, has been approved. Neither CHP nor JHHP will participate in the partial randomization evaluation design that is being conducted by the Rand Corporation.

Evaluation of the Prepaid Managed Health Care Demonstration

Project No.: 99-C-98489/9-02
Period: September 1985 - April 1989
Funding: $ 2,011,265
Award: Cooperative Agreement
Awardee: The Rand Corporation
1700 Main Street
Santa Monica, Calif. 90406
Project Officer: Spike Duzor
Division of Health Systems and Special Studies

Description: The Rand Corporation/University of California, Los Angeles, Health Financing Policy Center will conduct an independent evaluation of the cost effectiveness of the prepaid managed health care demonstration. This demonstration project is being conducted jointly by the Robert Wood Johnson Foundation (RWJF), the National Governors' Association, and the Health Care Financing Administration (HCFA). The demonstration is designed to enable health care providers to develop more efficient arrangements for the financing and delivery of health services. Most projects will be limited to Medicaid and will utilize prospective payment and case management. The evaluation of the demonstration is cosponsored by RWJF and HCFA. RWJF is funding the quality of care component, while HCFA is funding the cost and utilization component.

Status: Medicaid clients are currently being randomally assigned to HMO or fee-for-service settings in two demonstration sites, New York City and Miami. A first-year status report, highlighting the research design and status of demonstration sites, will be available in Spring 1987.

Geographic Variation and Long-Run Capitation Rate Setting for Medicare Expenditures

Funding: Brandeis University Health Policy Consortium Research (See page 172)
Project Officer: James Beebe
Division of Beneficiary Studies

Description: At present, Medicare capitation payments for health maintenance organization enrollees are set at a level that reflects existing geographic variations in the fee-for-service payment system. An ideal financing system would reflect geographic differences that are attributable to the cost of delivering appropriate health care services while not reflecting differences in styles of practice that are not associated with health outcomes. This research will decompose geographic variation into components attributable to:

- Differences in input prices.
- Differences in the health status of the population.
- Differences in medical practice associated with local supply structures.
- Unspecified factors associated with differences in medical practice patterns.

These components will be incorporated into a model that could serve to modify Medicare capitation rates.

Status: This task was approved in September 1986, and the project is in the early developmental stage.

Medicare as a Smart Buyer of Health Care: Lessons from the Private Sector

Funding: Brandeis University Health Policy Research Consortium (See page 172)
Project Officer: James Lubitz
Division of Beneficiary Studies

Description: What are the lessons for Medicare and Medicaid in the numerous private sector efforts to purchase health care more efficiently? This project will conduct case studies of efforts to change employee behavior, initiatives to foster provider cost consciousiness (such as health maintenance organization and preferred provider organizations), and administrative changes by firms for cost savings. The project will look for data on the cost-effectiveness of these efforts.

Status: The project is in the early developmental stage.

National Medical Care Utilization and Expenditure Survey

Perspectives on Health Care: United States, 1980

Funding: Intramural
Project Officer: Judith D. Kasper
Division of Beneficiary Studies

Description: The purpose of this project is to develop an overview report of major findings from the National Medical Care Utilization and Expenditure Survey. Data for the Nation and the Medicare and Medicaid populations will be presented, covering sociodemographic characteristics, access to primary care, and use and expenditures for all types of health services.

Status: The report, entitled "Perspectives on Health Care: United States, 1980," will be published in the National Medical Care Utilization and Expenditure Survey Series in Spring 1987.

Title XIX Data Development

Medicaid Tape-to-Tape: Data and Analysis

Project No.:	500-84-0037
Period:	June 1984 - March 1987
Funding:	$ 2,347,694
Award:	Contract
Contractor:	SysteMetrics, Inc. 104 West Anapamu Street Santa Barbara, Calif. 93101
Project Officers:	David K. Baugh and Penelope L. Pine Division of Program Studies

Description: This project continues the development and implementation of a Medicaid person-level data set from five State Medicaid Management Information Systems (MMIS) (California, Georgia, Michigan, New York, and Tennessee). This effort will acquire data on enrollment, claims, and providers for 1983 and 1984. These data will be used to create uniform files, provide descriptive reports, support analysis and evaluation, and develop methodology for on-line data base management. This project provides a continuum of 5 years of uniform Medicaid data for the conduct of analysis of program management, evaluation of policy alternatives, and feedback to States in the area of Medicaid financing.

Status: Acquisition and processing of person-level enrollment, claims, and provider data have been obtained from State MMIS. New "early return" tabulations are being designed to include data on mortality and diagnosis. Research is under way on a number of special topics including: Medicaid children, intermediate care services for the mentally retarded, long-term care, selected illnesses, hospital services, ambulatory services, and patterns of Medicaid utilization over time.

Medicaid Tape-to-Tape: Research Data and Analysis

Project No.: 500-86-0016
Period: March 1986 - March 1990
Funding: $ 5,091,560
Award: Contract
Contractor: SysteMetrics, Inc.
104 West Anapamu Street
Santa Barbara, Calif. 93101
Project Officers: Penelope L. Pine and David K. Baugh
Division of Program Studies

Description: This project continues the development and implementation of a Medicaid person-level data set from five State Medicaid Management Information Systems (MMIS) (California, Georgia, Michigan, New York, and Tennessee). This effort will acquire data on enrollment, claims, and providers for 1985-88. These data will be used to create uniform files, provide descriptive reports, support analysis and evaluation, and develop methodology for online data base management. This project will provide a continuum of 9 years of uniform Medicaid data for the conduct of analysis of program management, evaluation of policy alternatives, and feedback to States in the area of Medicaid financing.

Status: Currently, project staff are planning for the acquisition and processing of person-level enrollment, claims, and provider data that will be obtained from State MMIS systems. This project is also investigating the possibility of linking the data base to other kinds of health statistics and including new Medicaid variables. The project will continue to produce early return tabulations that summarize enrollment utilization and expenditures data for each year and each participating State.

Study of Selected Diseases in the Medicaid Population

Project No.: 500-84-0037
Period: September 1985 - December 1986
Funding: $ 24,778 (partial funding)
Award: Contract
Contractor: SysteMetrics, Inc.
104 West Anapamu Street
Santa Barbara, Calif. 93101
Project Officer: Penelope L. Pine
Division of Program Studies

Description: The Office of Research, Health Care Financing Administration, and the Centers for Disease Control, Division of Sexually Transmitted Diseases, have made an interagency agreement to provide data and analysis for specific categories of disease for the Medicaid population by using data from the Medicaid Tape-to-Tape project. The purpose of the study is to analyze Medicaid utilization, expenditures, and providers for Medicaid populations who have specific illnesses of interest, such as diabetes, accidents and injuries, and sexually transmitted diseases, and study epidemiologic patterns. One primary objective is to determine if these data can be used to study the incidence and prevalence of acquired immune deficiency syndrome.

Status: This agreement was implemented in September 1985. The Tape-to-Tape data files have been assessed for the availability of diagnosis data. Currently, enrollment, utilization, and provider files for the specified groups of diagnoses are being created from the Tape-to-Tape data set for use in later analysis.

Section 1619 Study on the Working Disabled

Project No.:	500-84-0037
Period:	June 1985 - June 1986
Funding:	$ 52,397 (partial funding)
Award:	Contract
Contractor:	SysteMetrics/McGraw Hill, Inc. 3939 Wisconsin Avenue, NW. Suite 300 Washington, D.C. 20016
Project Officer:	David K. Baugh Division of Program Studies

Description: The Social Security Disability Reform Act of 1984 has extended the Section 1619 entitlement on a temporary basis until June 30, 1987. Section 1619 was designed as a measure to provide the working disabled the incentive of retention of their health benefits under Medicaid to allow continuation of work even after loss of some or all of their Supplemental Security Income cash benefits. The Social Security Administration (SSA) has prepared a Report to Congress on the benefits of this provision to the working disabled. As part of the overall report (mandated by Public Law 98-460), the Health Care Financing Administration (HCFA) used Medicaid Tape-to-Tape data to write one of the appendixes to this report. This appendix describes the health utilization and expenditures for Section 1619 enrollees under Medicaid.

Status: The information HCFA provided comes from an ongoing Medicaid research effort known as the Medicaid Tape-to-Tape project. This project has developed the capability of analyzing person-level data for several years in five States (New York, California, Michigan, Georgia, and Tennessee) that represent 30 percent of the total Section 1619 population. For States that are participating in Tape-to-Tape, with the exception of Michigan, SSA data were matched with Tape-to-Tape data to provide Medicaid statistics for this population. In addition, HCFA has collected summary statistics from seven other State programs for this study. The data collected include such information as number of inpatient hospital days and outpatient visits utilized, types of service provided, and eligibility information on recipients. For these States, HCFA solicited utilization and expenditure information through telephone contacts, formal data requests, and technical assistance to the Medicaid staffs. The Report to Congress, "Implementation and Analysis of Public Law 98-460, Section 1619 (The Social Security Disability Benefits Reform Act of 1984)", was released by SSA on July 29, 1986. Copies can be obtained by calling SSA's Office of Public Inquiries at (301) 594-7700.

Medicaid Tape-to-Tape Ambulatory Services Project

Funding: Intramural
Project Director: Benson Dutton
Division of Reimbursement and Economic Studies

Description: This study seeks to provide information on Medicaid expenditures and utilization of selected ambulatory care episodes under the Aid to Families with Dependent Children category. The uniform Tape-to-Tape Medicaid data base for the States of Michigan and Georgia in 1981 and 1982 will be analyzed.

Status: A concept paper has been prepared and reviewed. Specific diagnoses have been selected for use as focal points in "tracer" analyses. Data preparation has begun. A staff paper will be prepared.

Program Management

State Medicaid Information Center Project

Project No.:	18-P-97923/3-03
Period:	January 1981 - December 1985
Funding:	$ 1,158,218
Award:	Grant
Grantee:	National Governors' Association Center for Policy Research Hall of the States Washington, D.C. 20001
Project Officer:	Aileen Pagan-Berlucchi Division of Program Studies

Description: This grant project monitors changes in State Medicaid program policy and disseminates information on these changes through a survey-based report updated every 6 months. The National Governors' Association (NGA) also contracts with research groups outside the Federal Government to produce research reports on special topics of current interest in the area. The project group at NGA works closely with State Medicaid directors and other program personnel in developing research topics and data collection priorities.

Status: Key products from this project include:

- Medicaid Survey Report: "Recent and Proposed Changes in State Medicaid Programs" from 1982 on, copublished with the Intergovernmental Health Policy Project.
- "Medicaid: Freedom of Choice" - A review of waiver applications submitted under Section 2175 of the Omnibus Budget Reconciliation Act of 1981, August 1982.
- "Volume Purchasing of Goods and Services in State Medicaid Programs," October 1982.
- "Medicaid Program Changes, State-by-State Profiles," May 1982.
- "Controlling Medicaid Costs: Second Surgical Opinion Programs," November 1982.
- "Catalog of State Medicaid Program Changes: The State Medicaid Program Information Center," December 1982.
- "Reducing Excessive Utilization of Medicaid Services: Recipient Lock-in Programs," June 1983.
- "Nursing Homes, Hospitals, and Medicaid: Reimbursement Policy Adjustments, 1981-1982," March 1983.

- "An Analysis of Responses to the Medicaid Home- and Community-Based Long-Term Care Waiver Program," June 1983.

- "Public Programs Financing Long-Term Care," January 1983.

- "Health Care Cost Containment: Proceedings of the National Governors' Association Committee of Human Resources Hearing," December 1983.

- "A Review of State Task Force and Special Study Recommendations to Address Health Care to the Indigent," November 1984, copublished with the Intergovernmental Health Policy Project.

- "Medicaid Diagnosis-Related Group Hospital Reimbursement Systems: A Technical Guide for State Implementation," June 1985.

On December 31, 1985, this grant was terminated and responsibility within the Health Care Financing Administration for this project was transferred from the Office of Research and Demonstrations to the Office of Intergovermental Affairs.

Establish and Manage a Medicaid Information and Assistance Project

Project No.: 18-C-98220/3-02
Period: September 1984 - December 1985
Funding: $ 120,000
Award: Cooperative Agreement
Awardee: American Public Welfare Association
1125 Fifteenth Street, Suite 300
Washington, D.C. 20005
Project Officer: Aileen Pagan-Berlucchi
Division of Program Studies

Description: This project is designed to analyze and make recommendations on information and assistance needs and resources from the perspective of the State Medicaid agencies. The three distinct but interrelated objectives are:

- To design, implement, and evaluate new mechanisms for matching the information and assistance needs of State Medicaid agencies with resources that are available to meet these needs.

- To continue to monitor the information and assistance needs of State Medicaid agencies, as well as the resources available to meet these needs.

- To coordinate activities with the Health Care Financing Administration (HCFA) and the State Medicaid Directors' Association aimed at identifying and altering problematic policies, procedures, and practices that pose as barriers to the effective administration of the Medicaid program.

Status: Key products from this project include:

- "A Directory of Information and Technical Assistance Resources for State Medicaid Agencies, 1985-86 Edition."

- Medicaid Information and Assistance Project monthly bulletin which addresses significant activities developed in: the Federal Register, court cases, and grant appeals board decisions. Forthcoming events on Medicaid-related issues are also outlined.

On December 31, 1985, this cooperative agreement was terminated and responsibility within HCFA for this project was transferred from the Office of Research and Demonstrations to the Office of Intergovermental Affairs. The final report for the cooperative agreement period is available from the National Technical Information Service, accession number PB86-206125/AS.

State Legislative Resource and Information Center on Health Care Financing

Project No.: 18-P-98266/8-02
Period: June 1983 - December 1985
Funding: $ 440,664
Award: Grant
Grantee: National Conference of State Legislatures
1125 Seventeenth Street, Suite 1500
Denver, Colo. 80202
Project Officer: Victor McVicker
Division of Hospital Experimentation

Description: This project demonstrates that a centralized source of information on State and Federal health care financing initiatives and programs can assist the Nation's State legislatures, as well as the Health Care Financing Administration (HCFA), by contributing to a more informed decisionmaking process. A number of mechanisms were used to establish and disseminate information from the resource center. These include surveys of State legislatures, publications, seminars, direct technical assistance, and responses to requests for specific information.

Status: On December 31, 1985, this grant was terminated and responsibility within HCFA for this project was transferred from the Office of Research and Demonstrations to the Office of Intergovernmental Affairs.

Intergovernmental Health Policy Project

Project No.: 18-P-98148/3-02
Period: March 1982 - December 1985
Funding: $ 1,305,696
Award: Grant
Grantee: George Washington University
Rice Hall, 6th Floor
Washington, D.C. 20052
Project Officer: Aileen Pagan-Berlucchi
Division of Program Studies

Description: This grant project describes current health law, policy, and legislative actions affecting State Medicaid programs. The Intergovernmental Health Policy Project (IHPP) compiles and disseminates information on State health activities, including new developments in the Medicaid cost-containment area. IHPP serves as a clearinghouse on State legislative actions. Through this clearinghouse function, IHPP distributes a monthly newsletter, "State Health Notes," detailing the current status and pending changes in the medical program. IHPP also disseminates special summaries of topical issues in the Medicaid program through the "Legislative Snapshot" report series and periodic background reports.

Status: Key products from the project include:

- Medicaid Survey Report: "Recent and Proposed Changes in State Medicaid Programs" from 1982 on, copublished with the National Governors' Association.
- "State Health Notes," a newsletter published 10 times each year.
- Background reports (for example, "Medigap: Issues and Update, 1982," "Alternatives to Institutional Care for the Elderly: An Analysis of State Initiatives," September 1981, and "Creating the Medical Marketplace: Selective Contracting in California's Medi-Cal Program, 1983."
- "Legislative Snapshot" (on such topics as nursing homes and Medicaid).
- "Focus On..." supplement to "State Health Notes," new series on special feature items within specific States.
- "DRG's and Medicaid: Recent State Actions," June 1984.
- "Status of Major State Policies Affecting Hospital Capital Investment, " July 1984.
- "Mental Health Benefits Under Medicaid: A Survey of the States," January 1984.
- "A Review of State Task Force and Special Studies Recommendations to Address Health Care for the Indigent," November 1984, copublished with the State Medicaid Information Center Project.
- "Medicaid Coverage and Payment Policies on Organ Transplants, a Fifty State Review," June 1985.
- "Major Changes in State Medicaid and Indigent Care Programs," July 1985.

On December 31, 1985, this grant was terminated and responsibility within the Health Care Financing Administration for this project was transferred from the Office of Research and Demonstrations to the Office of Intergovermental Affairs.

Economic and Clinical Outcomes of Three Drug Cost-Containment Strategies in Medicaid

Project No.: 18-C-98496/1
Period: July 1984 - July 1986
Funding: $ 203,718
Award: Cooperative Agreement
Awardee: Harvard Medical School
Department of Social Medicine and Health Policy
643 Huntington Avenue
Boston, Mass. 02115
Project Officer: Penelope L. Pine
Division of Program Studies

Description: The primary objectives of this study are to determine the impact of several State cost-containment strategies on drug expenditures implemented in 1981, the use of essential versus nonessential medications, and certain clinical outcomes. The principal research activities will consist of obtaining, condensing, and analyzing drug claims and other data from Medicaid Management Information Systems of several States. The research design will involve a number of time-series analyses in both study and comparison States.

Status: Three different types of Medicaid drug cost-containment strategies have been selected for study. The policy interventions and study locations are:

- Statewide limits on the number of prescriptions allowed per Medicaid patient in New Hampshire.
- Imposition of $1.00 copay for each prescribed drug in Vermont.
- Combination of a strict benefit cap and copayment in Arkansas.

The project has obtained data from New Hampshire, Vermont, and Arkansas. Programming and analyses have been completed, and aggregate data files for evaluating the impact of drug caps and copayments are being developed. Also, the project has completed the development of a drug-code access program. This program will allow health services researchers to reliably track or measure the use of specific drug groups in Medicaid and other health care programs in which drug utilization is recorded.

Research on Competitive Forces Driving Medicare Utilization

Project No: 17-C-98522/9-01
Period: September 1984 - March 1988
Funding: $ 241,939
Award: Cooperative Agreement
Awardee: SRI International
333 Ravenswood Avenue
Menlo Park, Calif. 94025
Project Officer: Judith Sangl
Division of Reimbursement and Economic Studies

Description: The major objective of this project is to analyze how various factors affect Medicare beneficiaries' utilization of and expenditures for services. These factors include: ownership of supplemental health insurance policies, beneficiaries' knowledge of the Medicare program and of the supplemental policies they own, and the extent for which beneficiaries are treated on assignment by physicians. Data sources include: a detailed 1982 survey of a random sample of Medicare beneficiaries in six States (California, Florida, Mississippi, New Jersey, Washington, and Wisconsin), copies of the insurance policies owned by beneficiaries in this sample, and complete Medicare utilization records for this sample from 1980 to 1982.

Status: Work has begun on this project with the receipt of the Medicare Automated Data Retrieval System (MADRS) files in June 1986. Project accomplishments during the first year include:

- Initial specifications for the design of the analysis files were completed.
- The following methodological issues were addressed: predicting billed charges, weights to be used in the analysis, calculating policy prices, examining bias in policies received, evaluating self-assessment of policy type as a measure of real policy type for those for whom policies were not obtained from their insurance company or employer, and defining the primary care physician.
- A literature search was conducted.
- Preliminary tables have been generated.

Impact of Medicaid Home and Community-Based Waiver Services for the Mentally Retarded in Maine

Project No: 11-C-98605/1-01
Period: July 1984 - January 1986
Funding: $ 48,438
Award: Cooperative Agreement
Awardee: Maine Department of Human Services
221 State Street
Augusta, Maine 04333
Project Officer: Gerald S. Adler
Division of Beneficiary Studies

Description: The study assesses the first year of a program that provides home- and community-based care to 200 mentally retarded persons in Maine, in lieu of institutional care. Program implementation and administration will be compared with the intended program design. Costs of services and quality of life for waiver participants will be compared with those of controls. Multiple regression will be used to estimate program effects while controlling for other characteristics of the participants and care settings. This project is being conducted by the Human Services Development Institute of the University of Southern Maine under contract to the State.

Status: Draft final report is under review and is expected to be available in late 1986.

Small Business Innovation

Develop the Technology of Aide Sharing into a Transferable Form for Use by Home Health Agencies to Reduce Home Health Costs

Project No.: 17-C-98480/3-02
Period: August 1984 - July 1985
Funding: $ 109,811
Award: Cooperative Agreement
Awardee: HCR, Inc.
2121 L Street, NW.
Washington, D.C. 20036
Project Officer: Doris Sneeringer
Division of Research and Demonstrations Systems Support

Description: This project is authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219). The objective of this project is to support the development of products and services by small firms in the health care sector. This project is intended to allow HCR to explore the market potential of providing the management support services needed to develop management tools for use by home health agencies in implementing the shared-aide concept. The shared-aide concept uses a home health aide to serve several clients that reside within a restricted geographical area, and whose needs for services are not continuous. Several visits in the same day to the same client could be involved. Special management techniques are needed for the recruitment and training of aides, monitoring and supervision of aides, establishing priorities and scheduling of services, and maintenance of time records for billing purposes.

Status: Phase I of this project, completed in March 1984, established the feasibility of reducing home health costs by using the shared-aide concept. In Phase II, HCR prepared an instructional manual for use by home health agencies and government agencies in establishing a shared-aide program. The manual described the methodology employed by HCR in performing job-task analysis, demand-based scheduling, aide training, supervision, recordkeeping and accounting procedures. HCR requested and was granted a no-cost extension through December 31, 1985, to complete and test the software program that will be marketed with the manual. The final report with instructional manual was submitted to the Health Care Financing Administration in April 1986.

Self-Care Home Computer Program to Reduce Health Care Costs

Project No.: 500-85-0053
Period: September 1985 - April 1986
Funding: $ 25,000
Award: Contract
Contractor: RK Associates
405 Stanton Street
Park Forest, Ill. 60466
Project Officer: David Schwartz
Division of Research and Demonstrations Systems Support

Description: This project is authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219). The major objective is to reduce the cost of medical care by increasing awareness of preventive and self-care measures by use of a proposed computer program. During Phase I, available "artificial intelligence" programs and specialized data bases will be evaluated and algorithms and flowcharts will be developed. During Phase II, the proposer will develop and evaluate the computer programs.

Status: The work to be performed for Phase I was completed in April 1986. Phase II of the project was not funded.

Development of Staging for Six Rehabilitation Conditions and a Cross-Reference System With Their Respective Diagnosis-Related Groups

Project No.: 500-85-0043
Period: September 1985 - April 1986
Funding: $ 21,365
Award: Contract
Contractor: Brown, Jensen, and Garloff Inc.
18 North Fourth Street, Suite 711
Minneapolis, Minn. 55401
Project Officer: David Schwartz
Division of Research and Demonstrations Systems Support

Description: This project is authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219). The project is a developmental study to define the stages of severity for six rehabilitation conditions and construct a cross-reference system for those staged conditions with their respective diagnostic groups. Physical therapists will define functional status criteria for each of the six conditions and use them as a tool to classify patients. This effort will supply the necessary content and protocol for producing and disseminating a valid teaching syllabus for the new system. This new system will allow the diagnosis-related groups (DRG's) system to better respond to the actual state of affairs in health care delivery and give health care providers a tool that will make them more responsive to the intent of DRG's.

Status: The work to be performed was completed in April 1986. Phase II of the project was not funded.

Consumer Health Insurance Planner for Seniors

Project No.:	500-85-0044
Period:	September 1985 - December 1987
Funding:	$ 121,738
Award:	Contract
Contractor:	Berkeley Planning Associates 3200 Adeline Street Berkeley, Calif. 94703
Project Officer:	David Schwartz Division of Research and Demonstrations Systems Support

Description: This project is authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219). Berkeley Planning Associates proposes to develop, pretest, and market a unique consumer-oriented guidebook for the retirees and preretirees to use in planning their health care insurance coverage. The planner will employ user-friendly, example-driven techniques to explain Medicare, Medicaid, and major private supplemental health insurance coverage. Phase I will result in a detailed outline of a manual, draft protocols for surveying private insurance companies, and a draft easy-to-use worksheet to compare benefits and costs. During Phase II, the draft manual will be tested and refined using a focus group and survey approach among seniors and long-term care experts. The finished product will include information about Medicaid spend-down regulations.

Status: Phase I of the project was completed in April 1986. Phase II was funded under the Small Business Innovation Research program.

A Voucher Insurance Plan to Mobilize Volunteer Support Among the Elderly

Project No.: 500-84-0064
Period: September 1984 - December 1987
Funding: $ 128,479
Award: Contract
Contractor: Berkeley Planning Associates
3200 Adeline Street
Berkeley, Calif. 94703
Project Officer: David Schwartz
Division of Research and Demonstrations Systems Support

Description: This project is authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219). The project is to develop a voucher insurance plan to mobilize voluntary support services among elderly Medicare beneficiaries. An individual would earn a voucher by providing volunteer services for other elderly individuals. These vouchers could then be redeemed when an individual becomes ill and requires assistance. A coordinator would handle the vouchers and the dispatching of volunteers. Phase II will have the voucher insurance plan (VIP) implemented, tested, and refined. The contractor will perform the following tasks:

- Development of computer software to match volunteers with recipients and maintain accounts.
- Development of a "How to Operate a VIP" manual.
- Development and marketing of a brochure to promote the VIP among prospective members.

Status: Phase I of the project was completed in April 1985. Phase II was funded under the Small Business Innovation Research program.

Consumer as a Partner in Medical Cost Containment

Project No.: 500-84-0063
Period: September 1984 - September 1987
Funding: $ 262,257
Award: Contract
Contractor: KENEKO Communications
1700 Mission Street, Suite 204
Santa Cruz, Calif. 95060
Project Officer: David Schwartz
Division of Research and Demonstrations Systems Support

Description: This project is authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219). The project is to develop a medical guide that will give information and assistance to consumers. Phase I consisted of obtaining commitments from test sites, the development of test measures, the development of testing programs, and examination of base-line data at the test sites. Phase II of the project will be a study using the instruments, test measures, and handbook developed during Phase I to evaluate the effectiveness of a health consumer training program (HCTP). The HCTP will be given to 1,800 employees of five corporations.

Status: The Phase I portion of the project was completed on April 30, 1985. It was decided to continue funding under Phase II of the Small Business Innovation Research program. Phase II will evaluate the effectiveness of the health consumer training program.

Develop a Guide to Help Medicare Recipients Select Health Maintenance Organizations and Competitive Medical Plans

Project No.: 500-86-0033
Period: September 1986 - March 1987
Funding: $ 34,840
Award: Contract
Contractor: Center Systems Research, Inc.
155 South El Molino, Suite 202
Pasadena, Calif. 91101
Project Officer: David Schwartz
Division of Research and Demonstrations Systems Support

Description: This project, authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219), proposes to develop a guide that will assist Medicare enrollees in choosing between traditional fee-for-service and prepaid coverage plans, and among available health maintenance organizations (HMO's) and competitive medical plans (CMP's). The methodology will involve identifying salient features of the two major alternative forms of coverage and of competing HMO's and CMP's. In Phase I, methods for accomplishing the project will be refined and the feasibility of pursuing development of the product assessed.

Status: The project is in the early developmental stage.

Quality Assessment and Level of Care Computer System

Project No.: 500-86-0029
Period: September 1986 - March 1987
Funding: $ 34,540
Award: Contract
Contractor: Rehabilitation Care Consultants, Inc.
6401 Odana Road
Madison, Wis. 53719
Project Officer: David Schwartz
Division of Research and Demonstrations Systems Support

Description: This project, authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219), proposes to develop a computer system for long-term care providers that will assess the quality and level of care provided residents in their facility. The system will use the quality assessment index (QAI) that will assess the impairment level, functional status, and service needs of residents, as well as the appropriate level of care required by those residents. The system will be piloted in Phase I in at least one facility to determine whether it is a viable system.

Status: The project is in the early developmental stage.

Development of Interactive Software to Assist in Providing Appropriate Care

Project No.: 500-86-0030
Period: September 1986 - March 1987
Funding: $ 29,931
Award: Contract
Contractor: I.S. Grupe, Inc.
948 Springer Drive
Lombard, Ill. 60148
Project Officer: David Schwartz
Division of Research and Demonstrations Systems Support

Description: This project, authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219), proposes to develop an interactive software package that relates treatment modalities to patients in the most optimum manner. It will be geared to the nursing home environment and will make use of the resource utilization groups (RUG'S) now being developed for relating treatment modalities to resources available and patient needs. The contractor plans to generate the specifications for the software in Phase I.

Status: The project is in the early developmental stage.

Development of Interactive Software to Assist in Providing Appropriate Care in Intensive Care Units

Project No.: 500-86-0031
Period: September 1986 - March 1987
Funding: $ 34,650
Award: Contract
Contractor: L.M.P. Associates
P.O. Box 42106
Washington, D.C. 20015
Project Officer: David Schwartz
Division of Research and Demonstrations Systems Support

Description: This project, authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219), proposes to develop an easy-to-use, interactive microcomputer-based system for intensive care units (ICU's). This system will measure and monitor the quality and level of ICU care, and evaluate and document the status of individual patients. By the end of Phase I, a system will be in place. Phase II funding will be used to field test and refine the system.

Status: The project is in the early developmental stage.

QUEST: Quality Assurance Expert System Testbed

Project No.: 500-86-0032
Period: September 1986 - March 1987
Funding: $ 44,451
Award: Contract
Contractor: Meridan Corporation
5113 Leesburg Pike
Falls Church, Va. 22041
Project Officer: David Schwartz
Division of Research and Demonstrations Systems Support

Description: This project, authorized under the Small Business Innovation Development Act of 1982 (Public Law 97-219), proposes to build a prototype expert system, named QUEST—an acronym for quality assurance expert system testbed. This would be a personal computer-resident, rule-based expert system to aid in the determination of deficient patient care. The system would be set up in modules that would allow for expansion for additional medical specialties and subspecialties at later stages. The system would have two modes of operation. In the first mode, periodic reviews of all treatment procedures and an attempt to identify patterns of deficient care would be performed. The second mode is to act as a physician's aid in the administration of care. The Phase I system would include only certain treatment regimens and deficiency patterns. Phase II, if funded, would expand and run field tests of the system.

Status: The project is in the early developmental stage.

Brandeis University Health Policy Research Consortium

Project No.: 99-C-98526/1-03
Period: March 1984 - May 1989
Funding: $ 5,265,750
Award: Cooperative Agreement
Awardee: Brandeis University Heller Graduate School
415 South Street
Waltham, Mass. 02254
Project Officer: Michael J. Hoban
Office of Research

Description: The Brandeis University Health Policy Research Consortium (HPRC) is supporting research that provides background for preparation of the Reports to Congress mandated in the legislation (Public Law 98-21) enacting the new Medicare prospective payment system (PPS). Also being conducted are various studies pertinent to Medicare's movement towards capitation and improvement of the Health Care Financing Administration's (HCFA) reimbursement techniques. The Brandeis HPRC includes the Boston University School of Medicine; the Center for Health Economics Research, Cambridge, Mass.; and The Urban Institute, Washington, D.C. These institutions provide expertise in the areas of health services delivery issues, physician payment alternatives, and Medicaid and long-term care policy options, as well as microsimulation and data processing capabilities. Some of the Brandeis Consortium research activities in support of congressionally mandated reports are:

- PPS impact on hospital financial status from the American Hospital Association data.
- PPS impact on competitive health plans.
- Long-term impact of PPS on rural and other hospitals.
- Development of diagnosis-related group methodology that will adequately capture illness severity and study of the correlation of severity with resource use.
- Issues raised by case-based reimbursement of pediatric hospitals.
- The effect of Medicare PPS on State Medicaid programs.

In addition, the Brandeis Consortium is sponsoring the PPS Technical Advisory Panel, which convenes quarterly, to advise the Director of the Office of Research on research activities related to the mandated PPS Reports to Congress.

The Brandeis Consortium is also conducting a wide range of additional activities such as:

- Reimbursement reform studies; in particular, how to price better under capitation.

- Review of present HCFA Part B data files to determine potential sources of data for program monitoring.
- Analysis of Medicaid micro data.
- Analysis of State initiatives to control expenditures of high-cost individuals.
- Selected projects for the Office of Demonstrations and Evaluations, including seven multiyear projects on demonstration issues.
- Short-term technical assistance projects.

Status: Each year under the cooperative agreement, the Brandeis HPRC and HCFA jointly develop an agenda of specific topics and projects to conduct. The Center is currently in its third year of operation. To date, numerous projects have been planned or have begun on research issues related to the mandated PPS reports and on demonstration issues. Project reports on the research activities on uncompensated care costs and on sole community hospitals and rural hospitals have been received and are being reviewed by HCFA and the Department.

The Rand/University of California, Los Angeles, Health Financing Policy Research Center

Project No.: 99-C-98489/9-03
Period: March 1984 - April 1989
Funding: $ 6,464,212
Award: Cooperative Agreement
Awardee: The Rand Corporation
1700 Main Street
Santa Monica, Calif. 90406
Project Officer: Thomas M. Kickham
Division of Long-Term Care Experimentation

Description: The primary responsibility of the Rand/University of California, Los Angeles (UCLA) Research Center is to provide expert consultation in planning, implementing, and evaluating demonstrations and experiments in the Medicare and Medicaid programs. Among the tasks to be performed are:

- Studying the impact of the prospective payment system on post-hospital costs and utilization.
- Developing a framework for a demonstration to extend the prospective payment system to post-hospital services.
- Developing options papers and recommendations concerning the planning, design, and implementation of demonstrations and evaluations.
- Studying the experience of providers and patients under the New Jersey diagnosis-related group (DRG) demonstration.
- Providing technical assistance to demonstration and evaluation grantees and contractors.
- Assisting in the refinement of the Health Care Financing Administration's waiver cost estimation procedures.
- Reviewing and making recommendations on demonstrations, research or evaluation designs, and deliverables.
- Developing a framework for a Medicare vouchers demonstration.
- Studying the impact of the prospective payment system on rural hospitals.
- Estimating the cost implications of acquired immune deficiency syndrome (AIDS) for the Medicaid program.

In addition, the Center is supporting the research that will be required for preparation of the Reports to Congress mandated in the legislation (Public Law 98-21) enacting the Medicare prospective payment system (PPS). These research activities will examine:

- The impact of PPS on classes of hospitals, beneficiaries, other payers, and other providers.
- The method under which rehabilitation hospitals and units can be paid on a prospective basis.
- The advisability of the provision of cost-of-care information to public and private payers.
- Methods for evaluating the impact of PPS on the quality of medical care.
- The higher-than-anticipated increase in the experiences of the diagnostic mix in the DRG system.
- The appropriateness of outlier payments, and the applicability of severity of illness, intensity of care, or other modifications to the DRG system.
- The feasibility of an admissions volume adjustment.

Status: Each year under the cooperative agreement, the Center and the Health Care Financing Administration jointly develop an agenda of specific topics and projects to conduct. The Center is currently in its third year of operation. To date, numerous projects have been planned or have begun on demonstration and evaluation issues and on program research issues. A considerable number of other projects have been completed during the first 2 project years.

Program Analysis

Health Services Utilization Study

Project No.:	18-P-98442/9-01
Period:	September 1983 - December 1986
Funding:	$ 616,268
Award:	Grant
Grantee:	The Rand Corporation 1700 Main Street Santa Monica, Calif. 90406
Project Officer:	James Lubitz Division of Beneficiary Studies

Description: The purpose of this study is to examine whether high-use rates of certain procedures in selected geographic areas reflect inappropriate overuse and, to a lesser extent, whether low procedure rates in other areas reflect underuse. Three procedures that show large geographic variation, consume a significant amount of resources, and are likely to be overused have been selected for study from six candidate procedures. Medicare Part B claims data from 12 areas in 8 States were used to study geographic variation. A high- and low-rate area will be selected from the 12 areas for each procedure. The records of 100 physicians for each procedure in each area will be studied to determine the indications for performing each procedure. Then the indications for each procedure, as abstracted from the medical records, will be compared with the indications drawn up by an expert panel of physicians. The hypothesis is that the indications in the high-rate areas will be less generally accepted, suggesting inappropriate overuse.

Status: Work on this study is under way with additional funding from three private foundations. Medicare Part B data have been gathered and are being analyzed. Literature reviews on the indications for three procedures have been completed. Procedures chosen for study are coronary angiography, diagnostic upper gastrointestinal endoscopy, and carotid endarterectomy. Physicians have met to rank indications for five procedures, and successful pilot tests have been completed. Data gathering, processing, and analysis are now under way on the indications for the study procedures. Results are expected by January 1987.

Use of Medicare Services by Disabled Enrollees Under 65 Years of Age

Funding: Intramural
Project Director: James Lubitz
Division of Beneficiary Studies

Description: More research has been devoted to the Medicare aged population than to the population of disabled enrollees under 65 years of age. Yet, disabled enrollees comprise about 10 percent of Medicare enrollment, and Medicare expenditures for them have been rising faster than for aged enrollees. To increase knowledge of the Medicare disabled population, analyses are being carried out on patterns of health services used by the disabled. In particular, this population is being analyzed by type of disability award, i.e., disabled worker, adult disabled in childhood (ADC), or disabled spouse. Also, the aged (over 65 years of age) Medicare population who were formerly disabled Medicare beneficiaries are being studied.

Status: Results from the first study of the disabled indicate that per capita reimbursement for the disabled are equal to that of the aged and disabled women exceed men in per capita reimbursement. The majority (82 percent) of the Medicare disabled population are disabled workers, 14 percent are adults disabled in childhood (ADC), and 4 percent are disabled spouses. Per capita reimbursement in 1978 for ADC's was considerably lower ($345) than for disabled workers ($924) or disabled spouses ($1,051). Aged Medicare beneficiaries who were formerly disabled Medicare beneficiaries have 1.9 times the per capita reimbursement of other Medicare beneficiaries in the same age group. Preliminary results also indicate that need for care, as indicated by use of Medicare services, does not diminish with time on the disability program. An article based on this study, "Health care use by Medicare's disabled enrollees," was published in the Health Care Financing Review, Vol. 7, No. 4, Summer 1986.

Use of Services by the Dually Entitled (Crossovers)

Funding: Intramural
Project Director: Alma McMillan
Division of Beneficiary Studies

Description: More than 13 percent of the aged population are covered by both Medicare and Medicaid. Two studies, previously published in the Summer 1983 and Winter 1984 issues of the Health Care Financing Review, found that the dually entitled (crossovers) population differs substantially from aged persons covered by Medicare only by demographic characteristics and health service use. The dually entitled had higher per capita costs and higher mortality; they were less educated, had a poorer health status, and had lower incomes.

Status: This study on the crossovers is planned using person-level data from Medicare and Medicaid in California, New York, Georgia, and Tennessee. It will focus on patterns of long-term care and hospital use by the crossovers. The link of Medicare and Medicaid data for crossovers is completed and some preliminary data have been produced. The link of Medicare and Medicaid data was based on records in the 1981 Continuous Medicare History Sample (CMHS) file and 1981 Medicaid Tape-to-Tape data for the four participating States. The match rates for the aged dually entitled enrollees for the four States ranged from 84 percent in New York to 97 percent in Georgia. In 1981, these four States had about one-third of the Nation's elderly Medicaid recipients and also accounted for about one-third of Medicaid expenditures. Preliminary data also show that 79 percent of the study population were not institutionalized during the year, while 21 percent were institutionalized the entire year or part of the year.

Studies of Medicare Use Before Death

Funding: Intramual
Project: Gerald Riley
Officers: Division of Beneficiary Studies

Description: These studies examine the use of Medicare services in the last years of life. This information is needed because of the large percentage of Medicare expenditures for enrollees in their last year and because of the interest in hospice care as an alternative kind of care for the terminally ill.

Status: The first study showed that 28 percent of Medicare expenditures are for persons in their last year, that persons who die receive more than six times the reimbursements of other enrollees, and that expenditures in the last year are concentrated in the last few months. The study also showed that the relative share of Medicare expenditures going to enrollees in their last year has changed little from 1967 to 1979. The results of this study were published in Health, United States, 1983, the annual report from the Secretary of the Department of Health and Human Services to the President and Congress, and in the Spring 1984 issue of the Health Care Financing Review. Knowledge gained in this study is being applied in the administration and evaluation of the hospice benefit. In addition, data on Medicare reimbursements for the dying in conventional settings will be used as comparison data to evaluate the cost and utilization experience under the new hospice benefit. A second study is under way to analyze Medicare use by cause of death. The study uses cause-of-death data from the National Center for Health Statistics linked to Medicare data. Medicare expenditures in the last year will be examined by cause of death (e.g., cancer, heart attack), type of service, and age and sex. Preliminary results indicate there is considerable variation in Medicare reimbursements in the last year of life, by cause of death. A draft paper on use and costs of Medicare services in the last year of life by cause of death has been written and will be submitted to a research journal for publication in 1987. A followup study will examine patterns of Medicare use and costs for 5 years before death, by cause of death.

The Relation of Surgical Volume and Other Factors to Mortality After Surgery

Funding: Intramural
Project Director: Gerald Riley
Division of Beneficiary Studies

Description: Do hospitals that do more surgeries have better outcomes in terms of mortality than other hospitals? Studies of the general population have found better outcomes for some operations in hospitals with a high volume of surgeries. This study investigates whether there is such a relation in the Medicare population for eight operations--transurethral prostatectomy; reduction of fracture of the femur; resection of intestine; cholecystectomy; repair of inguinal hernia; coronary bypass, and total and other hip repair.

Status: High surgical volumes were found to be significantly associated with lower mortality within 60 days of surgery for resection of the intestine, coronary artery bypass, transurethral prostatectomy, and arthroplasty of the hip (other than total replacement). For the other four procedures, no relationship was found between surgical volume and mortality. The analyses were repeated using in-hospital deaths instead of death within 60 days of surgery as the dependent variable, and the results indicated a considerably stronger association between volume and mortality. An article based on this study, "Outcomes of surgery in the Medicare aged population: Surgical volume and mortality" was published in the Health Care Financing Review, Vol. 7, No. 1, Fall 1985.

Rehospitalization After Surgery Among Medicare Enrollees

Funding: Intramural
Project Director: Gerald Riley
Division of Beneficiary Studies

Description: This study examines patterns of rehospitalization for Medicare enrollees after seven common operations. Patterns of rehospitalization by age, sex, type of hospital, and time after operation (up to 9 months) will be investigated. Diagnoses and procedures associated with rehospitalization will be described.

Status: Results show considerable variation among procedures with respect to rehospitalization within both 7 days and 30 days following discharge from the surgical stay. Rehospitalization rates following surgery were higher than the average for the Medicare population for all seven procedures, for at least 9 months following surgery. Regional patterns were also evident, with lower rates of rehospitalization in the Northeast and higher rates in the South. An article based on this study, "Outcomes of surgery in the Medicare aged population: Rehospitalization after surgery," was published in the Health Care Financing Review, Vol. 8, No. 1, Fall 1986.

Changes in the Distribution of Medicare Expenditures

Funding: Intramural
Project Director: Gerald Riley
Division of Beneficiary Studies

Description: A large portion of Medicare expenditures has historically been concentrated on a small number of beneficiaries who are heavy users of services. The question often arises as to whether expenditures under the program have become more or less concentrated over time among small numbers of high-cost individuals. This study compares distributions of Medicare reimbursements for 1969, 1975, and 1982. The data are analyzed for persons dying and for survivors in 1975 and 1982. The distribution of 1980 expenditures for the non-Medicare population, as reported in the National Medical Care Expenditure and Utilization Survey, are also examined.

Status: Data indicate that Medicare reimbursements have become slightly less concentrated among all enrollees in recent years. The concentration of expenditures was much greater among survivors than among people who died in 1975 and 1982, with little change in the distribution of expenditures within either group. An article based on this study, "Changes in distribution of Medicare expenditures among aged enrollees, 1969-82," was published in the Health Care Financing Review, Vol. 7, No. 3, Spring 1986.

Medicare and Medicaid Data Book

Funding: Intramural
Project Directors: Martin Ruther and Aileen Pagan-Berlucchi
Division of Program Studies

Description: This report provides descriptive statistics on the organization and operation of the Medicare and Medicaid programs. It compares the two programs' beneficiary characteristics, use of medical services, expenditures, financing, and administration. The 1984 edition includes a new two-part section describing Medicare policy as applied to the control of hospital care costs and analyzing changes in the factors that determine Medicaid expenditures. The report includes appendixes that provide addresses of Medicare intermediaries and carriers, Medicaid State agencies and medical assistance programs, and the offices in the Health Care Financing Administration responsible for various facets of the Medicare and Medicaid programs. This report provides a resource for public officials, researchers, policy analysts, and users and providers of health care.

Status: The Medicare and Medicaid Data Book, 1984, Stock No. 017-070-00412-1, price $6.50, has been published in the Program Statistics Series. Order by stock number from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Program Statistics Series Reports and Health Care Financing Research Briefs

Funding: Intramural
Project Directors: Charles Helbing and Martin Ruther
Division of Program Studies

Description: These statistical reports, notes, and briefs describe, monitor, measure, and evaluate Medicare program benefits, program initiatives, program operation, and performance. The annual Medicare benefit reports are mandated by the Social Security Law. The other program reports, notes, and briefs reflect current topical health issues of the day or current legislative and/or policy initiatives and directives.

Status: The following Health Care Financing Notes and Research Briefs have either been recently completed or have been sufficiently developed so that usable data are available on request:

- "Medicare: Use and Cost of the 66 Most Frequently Reported Principal Diagnoses for Beneficiaries Discharged from Short-Stay Hospitals in 1985."
- "Medicare: Inpatient Use of Short-Stay Hospitals, 1985."
- "Hospital Outpatient Services Under Medicare, Trends and Demographic Variations, 1984."
- "Medicare: Use and Charges for Inpatient Services in Short-Stay Hospitals, by Diagnosis-Related Groups, Calendar Years 1981 and 1984."
- "Medicare: Impact of Prospective Payment System on Severity of Illness, 1983-85."
- "Medicare: Surgical Procedures in Short-Stay Hospitals, by Census Region, 1983."
- "Medicare: Participating Provider and Suppliers of Service, December 1986."
- "Medicare: Raising the Age of Eligibility for Medicare to Age 67."
- "Medicare: Use and Cost of Skilled Nursing Care Facilities, 1984."
- "Nursing Home Bed Supply and Utilization, 1981-1984."
- "Medicare: Use and Cost of Short-Stay Hospital Services by Beneficiaries with the Principal Diagnosis of Alzheimer's Disease, 1981."
- "Medicare: Liability of Medicare Enrollees Using Physician Services, 1983."
- "Medicare: Use and Cost of Short-Stay Hospital Services by Beneficiaries with the Principal Diagnosis of Cataract, 1984."
- "Medicare: Use and Cost of Long-Stay Hospital Services, 1984."
- "Medicare: Use of Home Health Services, 1985."
- "Medicare: Use and Cost of Short-Stay Hospital Services by Beneficiaries with the Principal Diagnosis of Diabetes, 1984."
- "Medicare: A Study of Heart Disease in Aged Beneficiaries, 1984."
- "Medicare: Use of Short-Stay Hospital Inpatient Services by Principal Diagnosis, 1983-84."
- "Medicare: Use of Chiropractor Services, 1984."
- "Medicare: Comparison of Costs of Treatment in Alternative Settings for Selected Procedures, 1985."
- "Medicare: Proposed Catastrophic Coverage for Aged Beneficiaries."

Medicare/Medicaid Program Statistics and Information

Funding: Intramural
Project Director: Charles Helbing
Division of Program Studies

Description: This project is designed to provide Medicare program statistics, information, and analysis to Federal agencies and public or private parties requesting health care data for the eligible populations. The data cover the entire range of program benefits and are of a type not readily available in publications or other sources. The data are used for:

- Preparing statistical and analytical health care reports.
- Monitoring the performance and efficiency of the Medicare program.
- Evaluating the impact of new and proposed legislation and policy.
- Preparing special studies on the prospective payment system, catastrophic coverage, and other topics.

Status: During the first three quarters of 1986, approximately 200 requests for data were received. Many data requests with significant legislative/policy implications have been done for the Task Force on Catastrophic Illness. Some of the requests have resulted in further research leading to the development of various Research Briefs and Health Care Financing Notes. Two reports have been completed:

- "Medicare: Use and Charges for Inpatient Services in Short-Stay Hospitals, by Diagnosis-Related Groups, Calendar Years 1981 and 1984."
- "Medicare: Use and Cost of Short-Stay Hospital Services by Beneficiaries with the Principal Diagnosis of Diabetes, 1984."

Linkage of Continuous Disability History Sample and Continuous Medicare History Sample Files

Funding: Intramural
Project Officers: Gerald Riley, Division of Beneficiary Studies and Barry Bye, Social Security Administration

Description: Medicare utilization data will be linked to Social Security Administration data on a cohort of disabled workers who first became entitled to disability benefits in 1972. Their Medicare use from 1974 through 1981 will be studied to explore the relation of disability characteristics to Medicare use through time. The specific objectives of the project are:

- To describe the levels and patterns of reimbursable Medicare costs over time at the individual level for a cohort of disability beneficiaries from 1974 through 1981.
- To identify the characteristics of disabled beneficiaries that are associated with different reimbursement levels and patterns.
- To describe the individual costs and utilization components that comprise overall reimbursement amounts.

Status: The data files are being linked, after which data analyses can begin in Fall 1986.

Linkage of Continuous Work History Sample (CWHS) and Continuous Medicare History Sample (CMHS) Files

Funding: Intramural
Project Officer: Gerald Riley
Division of Beneficiary Studies

Description: Medicare utilization data will be linked to Social Security Administration data on the work histories, including earnings and primary industry of employment, of retired workers. Two studies are contemplated. The first involves an analysis of the use of Medicare services by industry of former employment. It is anticipated that some industries (e.g., coal mining) may be associated with poorer post-retirement health and, therefore, greater use of health services. The second study will examine the use of Medicare services by retirement patterns. For example, do those electing to begin receiving retirement benefits at 62-64 years of age use more health services after turning 65 years of age? The underlying assumption is that retirement decisions are often influenced by health status.

Status: The CWHS and CMHS files are now being linked, and it is anticipated that data analyses will begin in Fall 1986.

Program Evaluation

Medicaid Program Evaluation

Period: September 1983 - September 1987
Project Officer: Gerald S. Adler
Division of Beneficiary Studies

Description: The 3-year project will assess the changes made in the Medicaid program as a result of recent legislation. The Medicaid Program Evaluation focuses principally on program changes since the Omnibus Budget Reconciliation Act of 1981, an Act which considerably increased State flexibility in determining eligibility, reimbursement, and coverage under the program. The evaluation addresses the implementation and impact of selected changes in the program to provide knowledge for policy assessment and future legislative change. It is focused on a select list of issues and policy questions.

Status: Three contracts were awarded on September 30, 1983, to conduct the evaluation studies:

- La Jolla Management Corporation, with subcontractor SysteMetrics, is studying home- and community-based care and incentives for family care.
- Abt Associates, with subcontractors Health Economics Research and Compass Consulting, is studying hospital reimbursement changes.
- James Bell Associates, with subcontractors Syracuse University, Urban Institute, SysteMetrics, and National Governors' Association, is studying freedom of choice, eligibility, cost sharing, Federal financial participation, and subsequent legislation, and preparing the project synthesis report.

Final reports on the Abt and Bell contracts and an interim report on the La Jolla contract are expected in early 1987. The final report on the La Jolla contract is expected in late 1987.

Medicaid Program Evaluation: Cluster I

Project No.: 500-83-0056
Funding: $ 1,472,749
Award: Contract
Contractor: La Jolla Management Corporation
11426 Rockville Pike
Rockville, Md. 20852

Description: This project addresses two tasks as part of the Medicaid Program Evaluation. The first deals with the home- and community-based waiver program. Under Section 2176 of the Omnibus Budget Reconciliation Act of 1981, States under a waiver may institute a variety of home- and community-based services to individuals who "but for" the waiver would be in long-term care institutions. The following questions will be addressed: Has the program reduced institutionalization? Has the program reduced costs? Has cost shifting occurred from other programs, specifically Title XX of the Social Security Act and Title III of the Older Americans Act? Can we identify the elements of a successful program? The second task deals with financial incentives for family care. Several States provide financial support through direct payments or tax incentives to family members to encourage their assistance to their elderly relatives. The major questions are: What programs are in operation? What have been their costs and savings? Who are the beneficiaries of such programs and what are their characteristics? What are the characteristics of functionally limited persons living in the community that permit them to avoid institutionalization? What are the characteristics of successful programs?

Status: The contract was awarded September 30, 1983. A Report to Congress, "Studies Evaluating Medicaid Home- and Community-Based Care Waivers," was submitted to Congress in September 1985. An interim report will be issued in early 1987, with a final report expected in late 1987.

Medicaid Program Evaluation: Cluster II

Project No.: 500-83-0057
Funding: $ 763,629
Award: Contract
Contractor: Abt Associates
55 Wheeler Street
Cambridge, Mass. 02138

Description: This project addresses inpatient hospital reimbursement as part of the Medicaid Program Evaluation. To help bring hospital costs under control, the Omnibus Budget Reconciliation Act of 1981 granted the States new flexibility in the establishment of inpatient hospital reimbursement methodologies. Major questions are: What responses have States made to the options permitted by Federal law? Have reductions in expenditures resulted? Specifically, what has been the impact of the California competitive contracting program? Programs in Illinois, Pennsylvania, New Jersey, and Texas will be studied for comparison. What have been the effects on recipients and providers of care? Have costs been shifted to private payers? To what degree and in what ways has the implementation of Medicare prospective reimbursement had an impact on State Medicaid programs?

Status: The contract was awarded September 30, 1983. A final report is expected in early 1987.

Medicaid Program Evaluation: Cluster III

Project No.: 500-83-0058
Funding: $ 1,506,005
Award: Contract
Contractor: James Bell and Associates, Inc.
1700 North Moore Street, Suite 1622
Arlington, Va. 22209

Description: This project addresses several issues as part of the Medicaid Program Evaluation. The first is freedom-of-choice waivers. Under Section 2175 of the Omnibus Budget Reconciliation Act (OBRA) of 1981, States may institute a variety of programs to reduce costs by limiting the provision under Medicaid which guarantees freedom of choice of provider. Major questions are: How have the States responded to this provision? Have there been program savings? How have access to and quality of health care been affected? The second is eligibility. OBRA contained several changes which directly and indirectly reduced the number of persons eligible for Medicaid. Major questions are: How have the States responded to these provisions? How have eligibility changes in related programs (Aid to Families with Dependent Children and Supplemental Security Income) affected Medicaid enrollment? How have entitlement and expenditures been affected? How has the reduction in Medicaid coverage affected other assistance programs, out-of-pocket expenditures, and costs to hospitals and other payers? The third is cost sharing. Under the Tax Equity and Fiscal Responsibility Act of 1982, States are permitted to impose nominal copayments, with certain limitations, to reduce program outlays, and to instill cost consciousness on the part of the recipients. Major questions are: How have the States responded? What has been the effect of copayments on utilization and costs? The fourth is Federal financial participation. OBRA provides for the reduction of Federal matching funding for 3 years, beginning October 1, 1982, subject to certain exemptions. Major questions are: Which States were exempted from the reductions and for what reasons? How much did the Federal Government save? How did the States adjust to reduced funding? Fifth, as the Medicare prospective payment system changed the environment of Medicaid, the evaluation will attempt to address the implications of these new provisions. The final task of the project will be to provide for the preparation of an annual interpretation, summary, and synthesis of evaluation results.

Status: The contract was awarded September 30, 1983. Final reports are expected in early 1987. A Working Paper has been produced: "Medicaid Eligibility: A Descriptive Report of OBRA, TEFRA, and DEFRA Provisions, and State Responses," October 1984.

Medicare Automated Data Retrieval System

Project No.: HCFA-85-1375
Period: October 1985 - March 1986
Funding: $ 20,800
Award: Contract
Contractor: Howard Marantz
1140 Pleasant Hill Road
Sabastepol, Calif. 72304
Project Officer: Paul Lichtenstein
Division of Health Systems and Special Studies

Description: The Medicare Automated Data Retrieval System (MADRS) will reorganize the Medicare bill and payment records to improve the accessibility of the data. The Office of Research and Demonstrations has a continual need for 100-percent data by geographic region or on individual Medicare beneficiaries or providers for carrying out research studies and for evaluating demonstrations. The current 100-percent bill or payment record files are organized in weekly batches in health insurance claim (HIC) number sequence. To find records for any individual beneficiary, provider, or geographic region, it is necessary to search through all the tapes. MADRS proposes to sort the 100-percent bill payment record file into yearly files and then by geographic region (county) and HIC number. The MADRS system will be indexed by county, provider, and HIC number. Using MADRS, it would be possible to quickly locate the portion of the files where the required data is located and retrieve it for research and demonstration studies.

Status: The purpose of this contract was to test the MADRS programs that were previously created under another contract. The test report indicated that additional work was needed to complete the MADRS programs. Another purchase order has been prepared to have a contract correct the problems identified in the report and produce the first MADRS data file and documentation.

Quality

Development, Pilot Testing, and Refinement of Valid Outcome Measures for the Home Care Setting

Project No.: 18-C-98868/0-02
Period: September 1985 - August 1988
Funding: $ 188,766
Award: Cooperative Agreement
Awardee: Home Care Association of Washington
12721 30th NE., Suite 201
Seattle, Wash. 98125
Project Officer: Pete Rhodes
Division of Long-Term Care Experimentation

Description: Most efforts to evaluate home health care quality have focused on the structure or the process of care but neglected another important perspective: patient outcomes. This project, sponsored by the Home Care Association of Washington (HCAW), is designed to develop, pilot-test, and refine seven patient outcome measures for the quality of care by home health agencies. The project will conduct pilot tests in HCAW member agencies with 30-40 patients participating per agency.

Status: The three outcome scales that were pilot-tested the first year are discharge status, taking prescribed medications as prescribed, and general symptom distress. The project currently is analyzing the patient-level data collected during the pilot tests. The two outcome measures selected for testing in the second year are client satisfaction and a utilization review scale.

Geriatric Continence Research Project

Project No.:	1AA-85-0383
Period:	November 1985 - October 1988
Funding:	$ 562,653
Award:	Interagency Agreement
Agency:	Gerontology Research Center Francis Scott Key Medical Center 4940 Eastern Avenue Baltimore, Md. 21224
Project Officer:	William D. Clark Division of Long-Term Care Experimentation

Description: The Gerontology Research Center at the Francis Scott Key Medical Center, the intramural clinical research center of the National Institute on Aging (NIA), has been selected to conduct a jointly funded research project on geriatric continence of institutionalized patients in a 12-bed unit of the Mason Lord building. NIA is sponsoring this research effort with partial funding from the Health Care Financing Administration (HCFA). The 3-year project will test treatment courses involving behavioral modification techniques with 150 patients who are incontinent of urine, feces, or both. The major objectives of this research project are to:

- Test the medical effectiveness of treatment methodologies across 15 strata for 150 institutionalized patients.
- Determine the cost effectiveness of successful treatment methods being tested.
- Determine the potential value of successful treatments for general use with incontinent patients and publish project results.

Status: The special unit has been prepared for patient care, and appropriate staff members have been hired and trained. Patients were first admitted to the unit in December 1985.

Nonintrusive Outcome Measures: Identification and Validation

Project No.:	15-C-98684/9
Period:	September 1984 - December 1987
Funding:	$ 936,116
Award:	Cooperative Agreement
Awardee:	The Rand Corporation 1700 Main Street Santa Monica, Calif. 90406
Project Officer:	Gerald S. Adler Division of Beneficiary Studies

Description: The main objective of this project is to develop nonintrusive measures (administrative data) to determine the impact of selected changes in the health care sector, particularly prospective payment and diagnosis-related group (DRG) methodology, on the quality of medical care. Another objective is to identify short-stay hospital care that may be less than adequate. In addition, medical conditions that appear to be associated with lower levels of care will be identified. A set of nonintrusive outcome indicators for quality care review is proposed.

Status: The first phase of the study design has been implemented. Specification of data from the Medicare statistical system has been completed, and analysis has begun. An expert consensus panel has been convened to review the analysis and to recommend medical conditions for further study. In addition, chart review protocols have been developed to validate the administrative record data. A report "Differences Among Hospitals in Medicare Patient Mortality" has been published.

Develop Indexes of Hospital Efficiency and Quality

Project No.: 18-C-98841/5-01
Period: September 1985 - August 1987
Funding: $ 325,220
Award: Cooperative Agreement
Awardee: Commission on Professional and Hospital Activities
1968 Green Road
Ann Arbor, Mich. 48106
Project Officer: Lawrence E. Kucken
Division of Beneficiary Studies

Description: This study is designed to produce quality and efficiency indexes by using existing data bases from the Commission on Professional and Hospital Activities and the American Hospital Association. These indexes will provide the basis for monitoring simultaneous changes in efficiency and quality and for measuring efficiency/quality tradeoffs within hospitals.

Status: The project is in the second year of development, and preliminary efficiency index results are being analyzed.

Impact of the Prospective Payment System on the Quality of Inpatient Care

Project No.:	15-C-98663/5-01
Period:	September 1984 - September 1988
Funding:	$ 145,261
Award:	Cooperative Agreement
Awardee:	Commission of Professional and Hospital Activities 1968 Green Road P. O. Box 1809 Ann Arbor, Mich. 48106
Project Officer:	Lawrence E. Kucken Division of Beneficiary Studies

Description: This project is congressionally mandated by Public Law 98-21. It will evaluate the effect of the Medicare hospital prospective payment system on the quality of inpatient care received by Medicare patients by examining several indicators of hospital performance. This examination is to be based primarily on data from the Professional Activity Study maintained by the Commission on Professional and Hospital Activity (CPHA), supplemented by data from several other sources maintained by CPHA.

Status: The first year's project report has been completed. Plans call for incorporating the results of this report in the current Annual Report to Congress on the prospective payment system.

Impact of the DRG-Based Prospective Payment System on Quality of Care for Hospitalized Medicare Patients

Project No.: 18-C-98853/9-02
Period: September 1985 - September 1988
Funding: $ 2,210,403
Award: Cooperative Agreement
Awardee: The Rand Corporation
1700 Main Street
Santa Monica, Calif. 90406
Project Officer: Harry L. Savitt
Division of Beneficiary Studies

Description: This study will evaluate the impact of the prospective payment system on quality of care. It will assess potential effects of changes in inpatient hospital treatment patterns by examination of medical records and resultant health status outcomes. Quality measurements scores will be constructed for six medical conditions, before and after the introduction of prospective payment, taking into account:

- The nature, timing, and effects of medical procedures rendered.
- Disease severity.
- Comorbid conditions.

The effectiveness of medical care treatment will be evaluated by relating quality scores to mortality, readmission rates, and other outcome variables.

Status: The project is in its second year. During the first year, study areas and the number of data collectors to be assigned to each area for each of the five States in the study were determined; worksheets for all hospitals eligible for study in the five States were established; six disease categories (hip fracture, myocordial infarction, congestive heart failure, pneumonia, cerebrovascular accident, and depression) and their corresponding International Classifications of Diseases, 9th Revision, Clinical Modification codes were identified; six expert physician panels were convened to establish quality-of-care criteria for the six study diseases; and individualized project summary packages were developed and sent to each of the five participating peer review organizations. During the remaining cooperative agreement period, activities will center around data abstraction, instrument development, data collector recruiting and training, data collection, and analysis.

Health Status at Discharge Research Project

Project No.: 18-C-98862/01-1
Period: September 1985 - May 1986
Funding: $ 36,892
Award: Cooperative Agreement
Awardee: Northwest Oregon Health Systems
Park Plaza West, Building III, Suite 655
10700 SW. Beaverton-Hillsdale Highway
Beaverton, Oreg. 910005
Project Officer: Lawrence E. Kucken
Division of Beneficiary Studies

Description: The purpose of this study is:

- To evaluate a summary instrument for measuring discharge status in the aged population in terms of physical function, mental function, and post-hospital treatment needs.

- To analyze patient status of a random sample of Medicare patients (based on medical record data) to compare functional status before and after the implementation of the prospective payment system. Functional status measurement will utilize a combination of three established measurement scales.

Status: The health status summary instrument has been field tested, and a final report has been prepared on this pilot test. Supplemental funds have been awarded to validate the instrument.

Prospective Payment Beneficiary Impact Study

Funding: Intramural
Project Directors: Paul W. Eggers and James Lubitz
Division of Beneficiary Studies

Description: The studies in this area are designed to assess the potential impact of the prospective payment system on access to care and quality of care received by Medicare beneficiaries. Access to care is assessed by examining changes in admission rates in short-stay inpatient hospital facilities, lengths of stay, and total days of care received by Medicare beneficiaries. Quality of care is assessed primarily through examination of outcome criteria such as mortality rates and rehospitalization rates. Mortality rates used in the analyses include total population mortality, post-admission mortality rates (per 1,000 admissions) and post-admission mortality rates (per 1,000 persons). Rehospitalization rates are based on rehospitalizations within fixed intervals of time following discharge, such as 30 days or 60 days. Both the access to care and the quality of care studies examine rates by classes of individuals such as age, sex, and race. In addition, the analyses examine the aged, disabled, and end stage renal disease populations separately.

Status: Baseline data analyses have been performed and are included in the 1984 Annual Report to Congress on prospective payment mandated by Public Law 98-21. First-year implementation data (fiscal year 1984) have been analyzed and are included in the 1985 Annual Report to Congress. Followup analyses will be included in subsequent Reports to Congress.

Impact of Medicare Prospective Payment on Post-Hospital Care Among Medicare/Medicaid Recipients: Analysis of the "Tape-to-Tape" Data

Project No.: 500-85-0015
Period: August 1986 - December 1986
Funding: $ 111,968
Award: Contract
Contractor: Abt Associates, Inc.
55 Wheeler Street
Cambridge, Mass. 02138
Project Officer: Paul W. Eggers
Division of Beneficiary Studies

Description: This project is congressionally mandated by the 1983 Amendments (Public Law 98-21) to the Social Security Act. The objective of this study is to determine the extent to which use of Medicaid-covered services (post-inpatient discharge) have changed as a result of the impact of the prospective payment system (PPS). The analysis will be limited to crossover beneficiaries in Michigan and California. Using Tape-to-Tape data, a longitudinal analysis of Medicaid service use will be done for the years 1981 through 1984. The unit of analysis will be the hospitalization episode. Medicaid use of services will be examined for a 6-month period following discharge from the hospital. This study will test whether or not the shortened lengths of stay under PPS have resulted in increased utilization of long-term care services, physician care, and prescription drug use funded under the Medicaid program.

Status: The award was made in August 1986. Analytical file construction is currently under way. A report is expected to be included in the 1986 Annual Report to Congress on prospective payment.

Analysis of Hospital After Care Under Prospective Payment

Funding: System Sciences, Inc.
(See page 22)
Project Officer: Lawrence E. Kucken
Division of Beneficiary Studies

Description: The purpose of this pilot study is to develop and field test methods for determining the appropriateness of post-discharge after-care services. Study methods will involve classifying patients at the time of their discharge from the hospital according to their post-discharge service needs and applying professionally developed guidelines to project after-care needs. Projected need will then be compared with services received based upon interview data.

Status: This project is in the early developmental stage.

Changes in Post-Hospital Service Use By Medicare Beneficiaries

Project No.: 500-85-0015
Period: August 1986 - December 1986
Funding: $ 301,500
Award: Contract
Contractor: Abt Associates, Inc.
55 Wheeler Street
Cambridge, Mass. 02138
Project Officer: Paul W. Eggers
Division of Beneficiary Studies

Description: This project is congressionally mandated by the 1983 Amendments (Public Law 98-21) to the Social Security Act. The objective of this study is to determine the extent to which use of Medicare-covered services (post-inpatient discharge) have changed as a result of the impact of the prospective payment system (PPS). This study will test whether or not the shortened lengths of stay under PPS have resulted in increased utilization of Medicare-covered skilled nursing facilities, home health services, and physician services. The analysis will be based on a random sample of hospitalized patients for the years 1980 through 1984 and will be targeted on patients at high risk of having post-hospital subacute care needs. Linked Medicare claims files will be used to track changes in post-hospital use over this time. The unit of analysis will be the hospitalization episode. Medicare service use will be examined for a 6-month period following discharge from the hospital.

Status: The award was made in August 1986. Analytical file construction is currently under way. A report is expected to be included in the 1986 Annual Report to Congress on prospective payment.

Prospective Payment System Impact on Mortality Rates: Adjustments for Case-Mix Severity

Project No.:	500-85-0015
Period:	August 1986 - March 1987
Funding:	$ 124,582
Award:	Contract
Contractor:	Abt Associates, Inc. 55 Wheeler Street Cambridge, Mass. 02138
Project Officer:	Paul W. Eggers Division of Beneficiary Studies

Description: This project is congressionally mandated by the 1983 Amendments (Public Law 98-21) to the Social Security Act. The objective of this study is to develop a case-mix adjustment for use in post-admission mortality studies conducted as part of the overall evaluation of the impact of the prospective payment system on quality of care. Most measures of case mix are based on resource consumption. That is, diagnostic classifications are defined to be statistically homogeneous on resource consumption, and the relative costliness of each class of diagnoses is used as a weight in deriving the overall index value. Such case-mix indexes are of little value in studies of mortality rates. This study will develop a case-mix index that predicts the overall probability of death for a given mix of patients. This effort will develop a mortality based case-mix measure by differentiating between levels of disease severity within diagnosis-related groups (DRG's). The study will use a 20-percent sample of 1984 Medicare hospitalizations with indicators of 30-day post-admission mortality. Using the disease staging methodology, variations in severity within DRG will be compared to mortality rates to determine the extent to which severity accounts for variations in mortality. If the staging methodology increases the predictive power of DRG's in determining mortality rates, the method can then be used to determine case-mix differences between regions, providers, or across time that account for differences in mortality.

Status: The award was made in August 1986. Analytical file construction is currently under way. A report is expected to be included in the 1986 Annual Report to Congress on prospective payment.

End Stage Renal Disease

Developing Incentive Systems to Increase the Supply of Cadaveric Kidneys for Transplants

Project No.: 14-C-98333/1-02
Period: June 1983 - March 1986
Funding: $ 369,311
Award: Cooperative Agreement
Awardee: Brandeis University
415 South Street
Waltham, Mass. 02254
Project Officer: Paul W. Eggers
Division of Beneficiary Studies

Description: Using survey methodologies, this project will evaluate alternative approaches to increasing the participation of nongovernmental actors in organ procurement programs. The end result of the research will be a set of Health Care Financing Administration policy recommendations designed to improve the effectiveness of organ procurement networks and so increase the number of kidneys available for transplantation.

Status: The cooperative agreement was initiated June 1983. The methodology entails surveys of major participants in the organ procurement process. These include hospital administrators, directors of nursing, intensive care unit nurses, and neurosurgeons. Each group of these professionals was administered a questionnaire designed to elicit information concerning their knowledge and personal opinions about organ procurement, perceived barriers to organ procurement, and potential recommendations for improving the organ procurement process. In addition, donor families and the general public were interviewed to collect information on public attitudes toward organ procurement. Data collection has been completed, and the project is in the analysis phase. Much of the effort in 1985 and 1986 in this cooperative agreement has been in support of the National Task Force on Organ Transplantation and the Federal Office of Organ Transplantation. The results of this work have been incorporated into "Organ Transplantation: Issues and Recommendations," a report of the Task Force on Organ Transplantation. The final report from this cooperative agreement has been received and is under review. It will be available from the National Technical Information Service.

Cause and Failure to Transplant Cadaveric Human Organs

Project No.: 17-C-98728/1-01
Period: August 1986 - July 1989
Funding: $ 500,000
Award: Cooperative Agreement
Awardee: Brandeis University
415 South Street
Waltham, Mass. 02254
Project Officer: Paul W. Eggers
Division of Beneficiary Studies

Description: The project will determine the reasons for the high rate (19.6 percent) of wastage of cadaveric kidneys in the United States and make recommendations to reduce this loss in the future. Many studies have shown that kidney transplantation is beneficial both clinically and from a cost perspective. The major barrier to increased transplantation is organ availability. This study, through its measure of determinants of, and cures for, cadaver organ wastage, could help increase the efficiency of the organ procurement system.

Status: This project is in the early developmental stage.

Relative Effectiveness and Cost of Transplantation and Dialysis in End Stage Renal Disease

Project No.: 14-C-98372/5-04
Period: September 1983 - September 1988
Funding: $ 1,566,292
Award: Cooperative Agreement
Awardee: University of Michigan
Department of Epidemiology
109 Observatory Street
Ann Arbor, Mich. 48109
Project Officer: Carl Josephson
Division of Program Studies

Description: This study will perform a comprehensive assessment of the cost effectiveness of end stage renal disease treatment under different treatment modalities, an assessment of the impact of cyclosporine on transplant success, and a life-table analysis of risk factors for patient and graft survival. The study will use data from the Michigan Kidney Registry, supplemented by survey information and medical record abstractions. Because of the design of the study, it is anticipated that the project will demonstrate the utility of a longitudinal, patient-specific data system for policy decisionmaking at the Federal level.

Status: The awardee has made significant progress in all phases of this project. The basic research design is a phased cohort analysis of renal patients entering treatment modalities over two time periods, 1981-83 and 1984-86. Analysis of the data from the first cohort is being performed in the three main research areas: quality of life, survival, and cost effectiveness. Currently, the data collection activities are under way for the second cohort. Additionally, progress continues in the secondary goals of the research project, such as identifying diabetic etiological factors in end stage renal disease, using the Michigan Kidney Registry data for a variety of research purposes, and studying the relationship between immunosuppressive agents and malignant tumors.

Costs, Outcomes, and Competition in the End Stage Renal Disease Program

Project No.: 18-P-98056/3
Period: August 1981 - September 1984
Funding: $ 407,096
Award: Grant
Grantee: The Urban Institute
2100 M Street, NW.
Washington, D.C. 20037
Project Officer: William J. Sobaski
Division of Reimbursement and Economic Studies

Description: This project will aid in the overall assessment of the end stage renal disease (ESRD) program by studying three aspects:

- The determinants of the total cost of the program.
- Some measures of the health outcomes produced by the program.
- Alternative ways of organizing and improving the services.

Particular attention will be given to the effects of competition on the cost and quality of care among facilities in an area.

Status: Three major papers have been produced thus far under this grant:

- "Pro Competitive Health Insurance Proposals and their Implications for the ESRD Program."
- "Competition and Efficiency in the ESRD Program."
- "Financial Incentives and Policy Goals of the End Stage Renal Disease Program."

The first paper concludes that there are numerous ways to induce more competitive behavior in the delivery of ESRD service, especially maintenance dialysis, although there are significant implementation problems with some strategies. The second paper concludes that analysis of cost alone cannot determine appropriate reimbursement levels, because that determination requires a prior political decision of the appropriate level of amenities. The third paper concludes that the precise legislative intent regarding the goals of the ESRD program is ambiguous, particularly on treatment objectives. In December 1984, a report of recommendations for revising ESRD system central files was received. The final report was completed in May 1986.

End Stage Renal Disease Nutritional Therapy Study

Period:	September 1984 - August 1993
Award:	Interagency Agreement
Agency:	National Institute of Diabetes and Digestive and Kidney Disease
Project Officer:	Bonnie Edington Division of Health Systems and Special Studies

Description: In accordance with the congressional mandate (Public Law 96-499), this study, known as the Modification of Diet in Renal Disease (MDRD) study, seeks to determine: (1) the extent to which the commencement of nutritional therapy in early renal disease (limiting protein and providing nutritional supplements) can retard or arrest the progression of the disease, resulting in substantive deferment of dialysis, and (2) the administrative, financial, and other aspects of making nutritional therapy generally available under Medicare. The study is being conducted jointly by the National Institutes of Health (NIH) and the Health Care Financing Administration (HCFA). Initiation of full-scale clinical trials will be preceded by a developmental phase and a pilot test.

Status: Phase I, the developmental phase, began in September 1984 and concluded in December 1985. This phase produced a clinical protocol, forms manual, and operation manual. Phase II, a 2-year pilot study, began in January 1986 at nine clinical sites: Harbor General Hospital, University of California at Los Angeles Medical Center, Los Angeles, California; University of Southern California School of Medicine, Los Angeles County Hospital, Los Angeles, California; Johns Hopkins University Hospital, Baltimore, Maryland; New England Medical Center, Boston, Massachusetts; Brigham and Women's Hospital, Boston, Massachusetts; Beth Israel Hospital, Boston, Massachusetts; Massachusetts General Hospital, Boston, Massachusetts; Vanderbilt University Medical Center, Nashville, Tennessee; and University of Iowa, Hospitals and Clinics, Iowa City, Iowa. Patients within a specific range in level of kidney function are being screened, and only those manifesting a specific minimum in the rate of disease progression (decline in kidney function) enter the 3-month baseline period. Following baseline, patients are divided into two groups, based on their level of kidney function, and, within each group, randomly assigned to one of three nutritional therapy regimens. It is hoped that at least 108 patients (12 at each site) will complete at least 18 months of nutritional therapy. After the 2-year pilot study concludes in December 1987, a third phase of the study is expected to begin. This would be a 3-to-5 year full clinical trial involving 600 to 900 patients. At the conclusion of that phase, a 1-year analysis of cost effectiveness would be undertaken by HCFA.

Severity of Illness in End Stage Renal Disease Population in Northern Florida

Project No.: 14-C-98696/4-02
Period: September 1984 - December 1986
Funding: $ 509,356
Award: Cooperative Agreement
Awardee: University of Florida
Grinter Hall
Gainesville, Fla. 32610
Project Officer: Paul W. Eggers
Division of Beneficiary Studies

Description: The purpose of this study is to develop and test measures of severity of illness that predict resource consumption levels in the end stage renal disease (ESRD) program. These measures will be based on the acute physiology and chronic health evaluation (APACHE) system, which was developed to measure therapeutic effort and resource costs in intensive care units. Two components of APACHE, the therapeutic intervention scoring system (TISS) and the acute physiology score (APS) will be adapted to the special characteristics of the ESRD patient receiving dialysis. TISS and APS will then be used to measure ESRD case mix and resource consumption.

Status: The major activity of the first year of this study involved the development of an instrument to measure severity of illness variations in the chronic hemodialysis population. The instrument includes physiologic measures, dialysis treatment variations, measures of comorbidities, as well as socioeconomic and behavioral factors. Final revisions to the instrument were made in June 1985, based on comments from a technical advisory panel and reviews of patients charts in ESRD facilities to determine data availability. Seven hemodialysis units have agreed to participate in the study. The number of patients to be included will be approximately 560. Data collection began in Fall 1985. Second-year activities mainly involved data collection. The final phase of the project involves developing scaling and weighting indices for both patient severity and resource consumption. A final report is expected in Spring 1987.

Comparison of Quality of Life of End Stage Renal Disease Patients

Project No.: 14-C-98642/5-02
Period: September 1984 - September 1986
Funding: $ 102,976
Award: Cooperative Agreement
Awardee: University of Minnesota Family Study Center
1114 Social Sciences
Minneapolis, Minn. 55455
Project Officer: Paul W. Eggers
Division of Beneficiary Studies

Description: The objective of this study is to evaluate the quality of life of patients on different therapeutic regimens for end stage renal disease. The following groups will be compared:

- Transplant recipients randomly allocated to conventional immunosuppression.
- Transplant recipients randomly allocated to immunosuppression with cyclosporine.
- Patients on center hemodialysis.
- Patients on continuous ambulatory peritoneal dialysis.
- A historical control of patients who received transplants in 1970-73.

Clear-cut differences in survival do not necessarily distinguish among the above treatment modalities. Comparative quality of life is, therefore, an important criterion.

Status: This study is entering its second and final year. Information is available on 83 center hemodialysis patients, 510 continuous ambulatory peritonical dialysis (CAPD) patients, and 91 transplant recipients (40 receiving conventional immunosuppressive therapy and 51 cyclosporine). There are pronounced differences in objective measures of rehabilitation. More than 80 percent of male transplant recipients with functioning grafts work or are in school at least part-time (a proportion that is consistent with that seen nationally), but only 30 percent of male center hemodialysis patients have achieved an equal level of rehabilitation. Of the male CAPD patients, 46 percent work or attend school at least part-time. Patterns among female patients are similar, but less pronounced. Transplant patients also have the best subjective sense of well-being, but the differences are smaller in magnitude. Transplant patients who received cyclosporine score consistently higher on measures of well-being than those on conventional therapies, in part because of the lower incidence of rejection episodes and of complications of steroid therapy. A final report is expected in Fall 1986.

Waiver for the Northwest Kidney Center, Seattle, to be Reimbursed Directly for Providing Home Dialysis Training Services

Project No.: 95-C-98485/0-02
Period: November 1984 - October 1987
Award: Cooperative Agreement
Awardee: Northwest Kidney Center
700 Broadway
Seattle, Wash. 98118
Project Officer: Marla Aron
Division of Health Systems and Special Studies

Description: The Northwest Kidney Center (NKC) is conducting a pilot test of a home dialysis training program. Under this program, NKC will provide home dialysis training services to 6-10 patients per year at the Central Washington Hospital in Wenatchee, and St. Peter Hospital in Olympia, Washington. NKC will provide training in the homes of one to two hepatitis B antigen positive patients per year. The home dialysis training will be provided for 2-3 weeks depending on the individual patient. Training will be on a 5-day-week basis with 3 weekly hemodialyses, or continuously in the case of continuous ambulatory peritoneal dialysis. The goal is to show that a regionalized home dialysis training program will increase the number of patients choosing to dialyze at home.

Status: During the second project year, the demonstration population could include patients who carry the human t-cell lymphotropic virus type-III antibody. The Olympia Peninsula Kidney Center withdrew from the demonstration after hiring a home dialysis training nurse.

Comparative Analysis of the Cost and Outcomes of Kidney Transplants

Project No.:	14-C-98564/0-03
Period:	July 1984 - July 1987
Funding:	$ 1,009,010
Award:	Cooperative Agreement
Awardee:	Battelle Human Affairs Research Center 4000 NW. 41st Street Seattle, Wash. 98105
Project Officer:	Paul W. Eggers Division of Beneficiary Studies

Description: This is a multicenter observational study of the impact of cyclosporine on renal transplantation. A sample of 300 patients contributed by eight major centers experienced in the use of cyclosporine will be studied in depth. Detailed information on outcomes (mortality, complications, and disability) and costs will be collected on this sample and analyzed in terms of major prognostic factors. In addition, extensive data of a medical or biologic and of a sociologic nature will be obtained. The representativeness of the sample will be validated by comparison with the universe of patients treated with cyclosporine for whom more limited information is available in the Health Care Financing Administration Medical Information System data base.

Status: A collaboration with the scientific studies committee of the American Society of Transplant Surgeons was formalized, and a working group of physicians to advise and guide the biomedical component of the study was empaneled and met twice. The supplementary questionnaires designed to gather medical data were drafted and finalized after review by the medical working group. Patient selection criteria have been finalized. Participating transplant centers have been selected, and subcontracts for data acquisition have been negotiated. The second year of the project has been devoted largely to data collection. Five transplant centers agreed to participate in the study: University of California, San Francisco; Ohio State University; University of Pittsburgh; University of Texas, Houston; and University of Wisconsin. As of May 1, 1986, 159 patients had been recruited into the study. It is expected that data collection will continue until April 1987.

End Stage Renal Disease Annual Report to Congress

Funding: Intramural
Project: Paul W. Eggers
Director: Division of Beneficiary Studies

Description: The Office of Research and Demonstrations (ORD) has the responsibility for producing three sections included in each year's Report to Congress (Public Law 95-292). These are: end stage renal disease (ESRD) patient morbidity, ESRD patient mortality, and ancillary hospital costs.

Status: ORD has produced the three sections above for the following reports:

- 1981 ESRD Annual Report to Congress, HCFA Pub. No. 82-02144.
- 1982 ESRD Annual Report to Congress, Medicare Annual Report, Fiscal Year 1981, HCFA Pub. No. 02156.
- 1983 ESRD Annual Report to Congress, Medicare Annual Report, Fiscal Year 1982, HCFA Pub. No. 02157.
- 1984 ESRD Annual Report to Congress, Medicare Annual Report, Fiscal Year 1983, HCFA Pub. No. 02157.
- 1985 ESRD Annual Report to Congress, submitted for departmental approval.

Urban Health Clinics Demonstration

Project No.: 500-81-0048
Period: September 1981 - December 1985
Funding: $ 891,089
Award: Contract
Contractor: Technassociates, Inc.
1700 Rockville Pike, Suite 200
Rockville, Md. 20852
Project Officer: John F. Meitl
Division of Health Systems and Special Studies

Description: The Rural Health Clinics Act of 1977 (Public Law 95-210) mandated that the Department of Health and Human Services conduct demonstrations in urban medically underserved areas to test the relative advantages and disadvantages of cost-based and fee-for-service reimbursement for physician-directed clinics that employ physician assistants or nurse practitioners. The demonstration involves approximately 36 clinics in California and Tennessee. An appropriate definition of medically underserved areas will also be established by the Public Health Service.

Status: The 2-year operational phase of the demonstration ended on July 31, 1985. The quality-of-care abstracting process has been completed, and the data are currently being analyzed by the physician staff. As of July 31, 1985, claims have been processed for 3,549 beneficiaries that were seen by a physician assistant or nurse practitioner. These claims represent 11,226 clinic visits, and a total of $306,129 has been paid to participating clinics. A draft final report was submitted in Summer 1986 and is undergoing final review by the Health Care Financing Administration.

Evaluation of the Urban Health Clinics Demonstration

Project No.: 500-82-0025
Period: September 1982 - August 1986
Funding: $ 806,666
Award: Contract
Contractor: Arthur D. Little, Inc.
Acorn Park
Cambridge, Mass. 02140
Project Officer: Spike Duzor
Division of Health Systems and Special Studies

Description: The purpose of this contract is to evaluate the Urban Health Clinics Demonstration. As mandated by the Rural Health Clinics Act of 1977 (Public Law 95-210), this demonstration tested the relative advantages and disadvantages of cost-based and fee-for-service reimbursement for physician-directed clinics that employed physician assistants or nurse practitioners. The demonstration involved approximately 36 clinics in California and Tennessee. The evaluation will focus on use, cost, and quality of services.

Status: A draft final report is currently being reviewed by the Health Care Financing Administration. The final report is scheduled to be available in January 1987.

Medicare Clinical Social Worker Demonstration

Project No.: 500-82-0053
Period: September 1982 - December 1986
Funding: $ 541,301
Award: Contract
Contractor: SRI International
333 Ravenswood Avenue
Menlo Park, Calif. 94025
Project Officer: Kathleen Connors
Division of Health Systems and Special Studies

Description: The Omnibus Reconciliation Act of 1980 (Public Law 96-499) mandated that the Department of Health and Human Services conduct a demonstration to determine the effects of making the services of clinical social workers more generally available under Medicare. The demonstration allowed direct reimbursement to clinical social workers for their services rather than through a physician or clinic. This contract is for the design, implementation, and assessment of the direct reimbursement demonstration.

Status: Major tasks accomplished include establishing administrative claims-processing systems to be implemented by the Medicare carrier in the test site; training, marketing, and registering 1,500 clinical social workers in southern California; and implementing direct reimbursement in seven southern California counties where 1.2 million Medicare beneficiaries live. As of December 1985, approximately 400 beneficiaries had seen 200 clinical social workers participating in the demonstration, with approximately 5,194 services approved for reimbursement. Presently, the contractor is assessing the impact on mental health costs and utilization by both providers and Medicare beneficiaries.

Other Coverage

National Heart Transplant Study

Project No.:	500-81-0051
Period:	September 1981 - July 1985
Funding:	$ 1,626,294
Award:	Contract
Contractor:	Battelle Human Affairs Research Centers 4000 NE. 41st Street Seattle, Wash. 98105
Project Officer:	Joel H. Broida Division of Reimbursement and Economic Studies

Description: This project was designed to study the scientific, economic, ethical, and social impact of a decision on coverage and reimbursement of heart transplantation for beneficiaries of the Medicare program. The principal components of the study included the collection of information on survival rates of heart transplant patients and the total costs related to this procedure. In addition, analyses of information on organ donation, organ procurement, legal and ethical issues, and quality of life were carried out. The study was completed, and a final report was written and submitted to the Health Care Financing Administration (HCFA) in accordance with the provisions of the contract.

Status: The final report, which consisted of an Executive Summary and five additional volumes, was released by the Secretary of the Department of Health and Human Services at a press conference on May 2, 1985. Copies of the Executive Summary and Volumes 1-5 of the final report are available from the National Technical Information Service, accession numbers PB85-213213/AS and PB85-213205/AS, respectively. After careful review of the findings from this study and other supplementary materials, a policy decision was made to add heart transplantation as a covered service for Medicare beneficiaries at HCFA-designated heart transplant centers, after a set of proposed regulations have been implemented. On June 27, 1986, the Secretary and the HCFA Administrator held a press conference announcing this policy decision.

Evaluation of the Medicare Mental Health Demonstration

Project No.: 100-80-0148
Period: September 1980 - June 1985
Award: Contract
Contractor: Macro System, Inc.
8630 Fenton Street
Silver Spring, Md. 20910
Co-Project Officers: Sharman Stephens
Office of the Assistant Secretary for Planning and Evaluation
Tony Hausner
Division of Long-Term Care Experimentation

Description: This project evaluates the utilization and cost implications of a demonstration encompassing 40 sites that waived the physician-supervision requirements for Medicare reimbursement to mental health centers. Study areas will focus on assessment of impact of this waiver on mental health services, utilization patterns, overall cost to the Medicare program, and administrative and operational capacities of the participating mental health centers. The Office of the Assistant Secretary for Planning and Evaluation (ASPE), Department of Health and Human Services, is funding this project and administering it jointly with the Health Care Financing Administration.

Status: Macro Systems submitted the final report in September 1985. The project increased the utilization rate by enrollees from .2 percent to .4 percent from the baseline to the demonstration period. It reached a previously unserved population, largely females 65 years of age or over. The charges per encounter increased by 4 percent from the baseline to the demonstration period, whereas charges per hour for partial hospitalization decreased by 25 percent. Some 55 percent of the beneficiaries had charges less than $250. ASPE plans to award a new contract by September 1986 to assess the impact of the demonstration on total health care utilization. The supplementary report is due in Spring 1987.

Evaluation of Obstetrical Access Pilot Project

Project No.: 11-P-97578/9-02
Period: March 1980 - August 1984
Funding: $ 203,370
Award: Grant
Grantee: California Department of Health Services
714-744 P Street
Sacramento, Calif. 95814
Project Officer: Tony Hausner
Division of Long-Term Care Experimentation

Description: The purpose of the grant was to conduct an evaluation of the Obstetrical Access Pilot Project (Project No. 11-P-97223/9-03) which was completed in March 1983. The project tested the hypothesis in 10 clinical sites that the provision of early access to obstetrical services for low-income pregnant women would reduce subsequent morbidity of both infants and mothers. Services included health education, nutrition, and psychosocial assessments, in addition to prenatal, delivery, and postpartum services.

Status: The grantee submitted a final report in February 1985. The key findings of the evaluation were: the low-birth-weight rate was 4.7 percent for the demonstration group compared with 7 percent for a matched control group; and the project estimated that there was a 2-to-1 benefit-cost ratio in the first year resulting from a savings in neonatal intensive care services. The State of California approved legislation in 1984 authorizing the enhancement of prenatal care to MediCal recipients on a statewide basis and amended the State plan to cover these services under the regular MediCal program. Congress cited this study in support of Section 9501 of the Consolidated Omnibus Budget Reconciliation Act (COBRA) which became law in April 1986. This section extends prenatal care services for pregnant women. The final report is available from the National Technical Information Service, accession number PB85-173797/AS. A paper entitled "Low-Birth-Weight Rate Reduced by Obstetrical Access Project" was presented at the 1985 annual meeting of the American Public Health Association. A special report with the same title will be published in the Health Care Financing Review, Vol. 8, No. 3, Spring 1987.

Impact of Psychological Intervention on Health Care Utilization and Costs: A Prospective Study

Project No.:	11-C-98344/9-02
Period:	September 1983 - September 1988
Funding:	$ 974,494
Award:	Cooperative Agreement
Awardee:	Hawaii State Department of Social Services and Housing P.O. Box 339 Honolulu, Hawaii 96809
Project Officer:	Marla Aron Division of Health Systems and Special Studies

Description: The Medicaid population of the island of Oahu, Hawaii, is being randomly assigned (two-thirds into the experimental group and one-third into the control group) in this prospective study of the effects of short-term psychological treatment on subsequent Medicaid utilization. The clinical model used is based on the delivery of specific psychological services for specific conditions. The focus of the study is on three groups of Medicaid eligibles: the upper 15 percent of health care utilizers, individuals with specific illnesses that have psychosomatic components, and the group 55 years of age or over. In each case, previous studies have indicated that treatment has the potential to effect reduced utilization of total health care services. This demonstration is unique in that it is being done on a Medicaid population, whereas previous studies have been with health maintenance organization groups, Blue Cross members, and other nonindigent groups. A comparison group of Federal employees, randomized and stratified in the same manner, is also eligible for the same services, and will serve as a comparison group to previously reported studies to evaluate the clinical models' effectiveness.

Status: Space has been leased on the island of Oahu for a counseling center, known as the Biodyne Center. Six clinical therapists have joined the staff and have completed special training in the clinic's form of short-term therapy. A training manual and 32 videotapes have been produced. Client intake began in May 1984, and more than 1,000 clients have participated in treatment through September 1986.

New Jersey Mobile Intensive Care System

Project No.:	95-P-98352/2-01
Period:	November 1983 - October 1986
Award:	Grant
Grantee:	New Jersey State Department of Health CN 363 Trenton, N.J. 08625
Project Officer:	Cynthia K. Mason Division of Hospital Experimentation

Description: The purpose of the Mobile Intensive Care Unit (MICU) demonstration is to test the cost effectiveness of New Jersey's approach to the provision of emergency advanced life-support services. The New Jersey MICU system is a statewide network of medical emergency vehicles that provide on-site advanced life-support services and are staffed by paid paramedics. However, most MICU's are not equipped to transport patients. That function remains the responsibility of volunteer ambulance squads. Therefore, most emergency calls are answered by two vehicles, an MICU and an ambulance. The MICU's, as currently operated, are not covered by traditional Medicare coverage principles. Under the demonstration, Medicare, Medicaid, and other third-party payers cover MICU charges as outpatient services. For Medicare, the charge is paid from the Part B Trust Fund unless the patient is admitted to a hospital. In such circumstances, the MICU charge is included on the inpatient bill.

Status: As of September 1986, the equivalent of 58 full-time MICU vehicles were in operation. New Jersey has requested an extension of the demonstration period in order to determine how to secure permanent funding for advanced life-support services in the State. If approved, the State would use the extension period to convene an advisory oversight group, including outside experts, to study the issue and to take whatever actions are necessary.

Medigap Study of Comparative Effectiveness of State Regulations

Funding: Intramural
Project Director: Judith Sangl
Division of Reimbursement and Economic Studies

Description: Section 507 of Public Law 96-265, the Social Security Disability Amendments of 1980, requires a comprehensive study and evaluation of the comparative effectiveness of various State approaches to the regulation of Medicare supplemental policies in:

- Limiting marketing and agent abuse.
- Assuring informed consumer choice.
- Promoting policies with reasonable economic benefits.
- Reducing the purchase of unnecessary duplicative coverage.
- Improving price competition.

Section 507 also states that the study shall address the need for standards or certification of health insurance policies, other than Medicare supplemental policies, sold to Medicare beneficiaries.

Status: A consumer survey of Medicare beneficiaries in six States and an industry survey of the companies that sell insurance to them were conducted by SRI International under Health Care Financing Administration Contract No. 500-81-0050. The final report of the consumer survey was completed in Fall 1983 and that of the industry survey was completed in May 1984. The consumer report found that three State actions affected the purchase of higher quality policies. They were:

- Establishing minimum benefit requirements.
- Setting minimum loss ratios.
- Distributing consumer guides.

Although State regulations seemed to have less impact on sales abuse, two strategies—distributing consumer guides and issuing press releases—appeared to have some beneficial effect. Finally, the distribution of consumer guides was associated with greater consumer knowledge of Medicare or of the policies purchased. The Report to Congress will be based largely on the consumer survey results. The report is forthcoming.

Registered Dietitians in Home Care

Funding: Intramural
Project Director: Marni Hall
Division of Reimbursement and Economic Studies

Description: Section 958 of Public Law 96-499, the Omnibus Budget Reconciliation Act of 1980, directs the Department of Health and Human Services to conduct a study of "the circumstances and conditions under which services furnished by registered dietitians should be covered as a home health benefit under Title XVIII of the Social Security Act." The study had three objectives:

- To assess Medicare beneficiaries' needs for direct clinical counseling by registered dietitians in the home.
- To explore alternative methods for coverage and reimbursement.
- To estimate utilization rates and costs for the alternative methods of coverage and reimbursement.

Status: The report was sent to the Congress in March 1986. The Department recommended the continuation of present Medicare coverage for registered dietitians services in the home. This coverage includes, under home health benefits, payment on a cost-per-visit basis for nutritional therapy services provided by visiting nurses. In addition, home health agencies may retain registered dietitians as consultants to advise and educate their staffs or to make necessary home visits and include an allocated portion of the cost in their Medicare administrative or overhead expenses. In addition, the report also stated that the Department will continue to develop and test alternative home health reimbursement methods which will encourage the use of many services, including dietitian's services, which are beneficial and efficient.

Home Respiratory Therapy Services

Funding: Intramural
Project Director: Marni Hall
Division of Reimbursement and Economic Studies

Description: Section 958 of Public Law 96-499, the Omnibus Budget Reconciliation Act of 1980, requires that the Department of Health and Human Services conduct "a study of the circumstances and conditions under which services furnished with respect to respiratory therapy should be covered as a home health benefit under Title XVIII of the Social Security Act." This study evaluates these issues and examines the present "state of the art" in respiratory therapy and the current availability of respiratory therapy services. It also examines the medical and economic ramifications of expanding Medicare benefits to include those home services provided by respiratory therapists.

Status: The report was submitted to Congress in March 1986. The Department recommended that present Medicare coverage of home respiratory therapy services be retained. This coverage includes, under home benefits, payment on a cost-per-visit basis for respiratory therapy services which are delivered by nurses or physical therapists. Additionally, home health agencies may retain respiratory therapy practitioners as consultants to advise and educate their staff or to make necessary home visits and include an allocated portion of the cost in their Medicare administrative or overhead expenses. Oxygen and other respiratory equipment and supplies are covered by Medicare's durable medical equipment (DME) benefit. The report also states that expansion of cost-per-visit payments to cover home visits by respiratory therapists is not consistent with the Department's current development of reimbursement alternatives. The Department favors fundamental reimbursement reform involving a broad spectrum of home health services and is developing and testing alternative home health reimbursement methods which will reward the beneficial and efficient use of many services including respiratory therapy.

Alcoholism Services Demonstration Projects

Period: September 1981 - January 1986
Project Officer: Arne Anderson
Division of Health Systems and Special Studies

Description: The following six projects are a collaborative demonstration between the Office of Research and Demonstrations, Health Care Financing Administration, and the National Institute on Alcohol Abuse and Alcoholism, Public Health Service. These demonstration projects are designed to test the feasibility and cost effectiveness of providing limited coverage for alcoholism treatment services given in freestanding (nonhospital) treatment centers. Each project is uniformly using the following service limits for Medicare and/or Medicaid services:

- Alcohol detoxification--No limit on episodes.
- Inpatient treatment--Up to 30 days per year.
- Outpatient treatment--Up to 45 visits per year.

Alcoholism Services Under Medicare: Connecticut Demonstration

Project No.: 95-P-97968/1-04
Funding: $ 324,046
Grantee: Connecticut Alcohol and Drug Abuse Commission
999 Asylum Avenue
Hartford, Conn. 06105

Status: Medicare coverage of services in Connecticut was initiated on July 1, 1982, and concluded on September 30, 1985. The State had 12 providers participating in the demonstration in Medicare only. Provider staff were trained in billing and cost-reporting procedures. A beneficiary and referral centers demonstration-awareness program was developed within the target area. Through July 1985, more than 600 Medicare beneficiaries entered treatment at the 12 provider sites. The project ended on December 29, 1985. The report, "The State of Connecticut's Final Report for the HCFA/NIAAA Demonstration for Treating the Elderly Alcohol Abuser," is available from the National Technical Information Service, accession number PB86-184827/AS.

Alcoholism Services Under Medicare and Medicaid: Illinois Demonstration

Project No.: 95-P-97971/5-04 (Medicare)
Funding: $ 148,018
Award: Grant
Grantee: Department of Alcoholism and Substance Abuse
901 Southwind Road
Springfield, Ill. 62703

Project No.: 11-P-97972/5-04 (Medicaid)
Funding: $ 168,252
Award: Grant
Grantee: Department of Public Aid
931 East Washington Street
Springfield, Ill. 62703

Status: Coverage of services in Illinois was initiated on July 1, 1982. Medicare coverage ended on September 30, 1985, and Medicaid coverage under the demonstration ended on January 29, 1986. The State had 12 providers participating in the demonstration in both Medicare and Medicaid. Provider staff were trained in billing and cost-reporting procedures. A beneficiary and referral centers demonstration-awareness program was developed within the target area. Illinois developed a prospective rate for alcoholism services. Approximately 200 Medicare beneficiaries and 680 Medicaid recipients entered treatment at the 12 sites. The project ended on January 29, 1986.

Alcoholism Services Under Medicare and Medicaid: Michigan Demonstration

Project No.: 95-P-97975/5-04 (Medicare)
Funding: $ 54,172
Award: Grant
Grantee: Office of Substance Abuse Services
Department of Public Health
3500 North Logan
Box 30035
Lansing, Mich. 48909

Project No.: 11-P-97976/5-04 (Medicaid)
Funding: $ 258,793
Award: Grant
Grantee: Medical Services Administration
Department of Social Services
300 South Capital Avenue
Lansing, Mich. 48909

Status: Coverage of services in Michigan was initiated on July 1, 1982. Medicare coverage ended on September 30, 1985, and Medicaid coverage under the demonstration ended on November 29, 1985. The State had 24 providers participating in the demonstration in both Medicare and Medicaid. Provider staff were trained in billing

and cost-reporting procedures. A beneficiary and referral centers demonstration-awareness program was developed within the target area. Approximately 750 Medicare beneficiaries and 2,500 Medicaid recipients entered treatment at the 24 sites. The project ended on November 29, 1985. The final report is being revised and is expected in 1987.

Alcoholism Services Under Medicare and Medicaid: New Jersey Demonstration

Project No.: 99-P-97973/2-04
Funding: $ 386,806
Award: Grant
Grantee: Division of Medical Assistance and Health Services
325 East State Street
Trenton, N.J. 08625

Status: Coverage of services in New Jersey was initiated in August 1982 for Medicare and in October 1982 for Medicaid. Medicare coverage ended on September 30, 1985, and Medicaid coverage under the demonstration ended on December 29, 1985. The State had 24 providers participating in the demonstration in both Medicare and Medicaid. Provider staff were trained in billing and cost-reporting procedures. A beneficiary and referral centers demonstration-awareness program was developed within the target area. A total of 725 Medicare beneficiaries and 1,342 Medicaid recipients entered treatment at the participating 24 sites. The project ended on December 29, 1985. A final report was submitted in March 1986. The report, "New Jersey HCFA Alcoholism Project (HAP)," is available from the National Technical Information Service, accession number PB86-216728/AS.

Alcoholism Services Under Medicare and Medicaid: New York Demonstration

Project No.: 99-P-97979/2-04
Funding: $ 383,739
Award: Grant
Grantee: Division of Medical Assistance
Department of Social Services
40 North Pearl Street
Albany, N.Y. 12243

Status: Coverage of services in New York was initiated on July 1, 1982. Medicare coverage ended on September 30, 1985, and Medicaid coverage under the demonstration ended on November 29, 1985. The State had 15 providers participating in the demonstration in both Medicare and Medicaid. Provider staff were trained in billing and cost-reporting procedures. A beneficiary and referral centers demonstration-awareness program was developed within the target area. Approximately 300 Medicare beneficiaries and 500 Medicaid recipients entered treatment at the 15 sites. The project ended on November 29, 1985. A final report to the Health Care Financing Administration was submitted in April 1986 and is available from the National Technical Information Service, accession number PB86-215787/AS.

Alcoholism Services Under Medicare: Oklahoma Demonstration

Project No.: 95-P-97983/6-04
Period: September 1981 - December 1985
Funding: $ 574,872
Award: Grant
Grantee: American Indian Institute
University of Oklahoma at Norman
555 Constitution Avenue
Norman, Okla. 73037

Status: Medicare coverage of services in Oklahoma was initiated on July 1, 1982, and concluded on September 30, 1985. The State had 19 providers participating in the demonstration in Medicare only. Provider staff were trained in billing and cost-reporting procedures. A beneficiary and referral centers demonstration-awareness program was developed within the target area. A total of 318 Medicare beneficiaries entered treatment at the 19 sites. The project ended on December 29, 1985. A final report was received in December 1985. The report, "Oklahoma Medicare Alcoholism Services Demonstration Project," is available from the National Technical Information Service, accession number PB86-202652/AS.

Evaluation of the Alcoholism Services Demonstration

Project No.: 500-83-0023
Period: April 1983 - March 1987
Funding: $ 2,644,996
Award: Contract
Contractor: Lawrence Johnson and Associates, Inc.
4545 42nd Street, NW.
Washington, D.C. 20016
Project Officer: Paul Lichtenstein
Division of Health Systems and Special Studies

Description: This is an evaluation of the effectiveness of the demonstration that expands Medicare and/or Medicaid coverage to freestanding alcoholism treatment centers. It will examine the impact of the demonstration on the use and cost of services. The project is supported by funds from the National Institute on Alcohol Abuse and Alcoholism, Public Health Service, and the Health Care Financing Administration.

Status: The research design was completed in March 1983. The contractor is currently implementing the research design. The final report is expected in March 1987. The contractor has provided a case study and interim analytical reports on cost and use of services under the demonstration.

Beneficiary Awareness

Cost of Care Information to Consumers

Funding: The Rand/University of California, Los Angeles Health Financing Policy Research Center (See page 174)

Project Officer: John C. Langenbrunner, Division of Reimbursement and Economic Studies

Description: Recent changes in Federal payment policy have contributed to a growing recognition of the importance of providing consumers with medical information on health care costs. A few programs providing such information have been in place for some time, and many more are being developed. The Federal Government is also concerned with increasing consumers' access to information that will enable them to make informed choices in the health care market. This study begins to develop the data necessary to assess the value of programs to provide consumers with information about health care costs and to examine models for such programs. Consumer education efforts may improve market efficiency by increasing the level of information that consumers bring to decisionmaking. However, there are costs associated with communicating information to consumers. To assess the cost/benefit tradeoff requires information about present knowledge that consumers have, the impact of knowledge on decisionmaking, and the cost effectiveness of alternative dissemination policies. The objective has been to gather existing evidence on these issues and to propose an agenda for future research. The research approach proceeded along two parallel lines. One approach analyzed the existing empirical and theoretical literature concerning consumer decisionmaking and information processing in the health sector. The second approach surveyed current efforts to distribute information to consumers, emphasizing programs aimed at Medicare beneficiaries.

Status: The 1983 Amendments (Public Law 98-21) to the Social Security Act required that a report be submitted to the Congress on the "advisability of having hospitals make available information on the cost of care to patients financed by both public programs and private payers." The Health Care Financing Administration utilized the research findings of this study in developing the report. Released in August 1985, this Report to Congress offered some key considerations for those in both the public and nongovernmental sectors who design information programs. The original research report is available directly from the Rand Corporation (No. R-3262-HCFA).

Test of the Out-of-Pocket Cost Savings as an Incentive for Changing Beneficiary Choice Behavior

Project No.:	17-C-98392/3-02
Period:	September 1983 - December 1986
Funding:	$ 709,316
Award:	Cooperative Agreement
Awardee:	Morgan State University Institute for Urban Research Baltimore, Md. 21239
Project Officer:	Benson Dutton Division of Reimbursement and Economic Studies

Description: The project is designed to develop basic knowledge on how elderly health care consumers obtain and process information, and how they balance various factors when making decisions under Medicare. The project has four objectives:

- To investigate ways of making beneficiaries more cost conscious.
- To examine the impact of information on expected out-of-pocket costs on beneficiary choice and behavior.
- To devise optimal approaches for beneficiaries to use in approaching their providers.
- To train beneficiaries in these techniques and test their effects.

Status: The project's accomplishments to date included the first-year activities of refinement of the research design, completion of the literature search, local data collection, development of the out-of-pocket cost model, identification of the pre-enrollee sample source, and the physician's survey. Second-year tasks included the physician's survey, the Medicare pre-enrollee survey, development of out-of-pocket costs from an actuarial model, development of training materials for use in the in-person information seminars, and the informative telephone seminars. Third-year tasks are scheduled to include analysis of pre-enrollee survey data, preparation of a report on pre-enrollee survey data, the holding of informative seminars with new Medicare beneficiaries, a post-choice study, a post-choice experience telephone survey, the development of a list of policy papers with review by the Health Care Financing Administration, and preparation of a final report. A no-cost extension has been granted to rectify delays experienced in the first year.

Information for Prudent Insurance Choices

Project No: 18-C-98686/9-02
Period: November 1984 - March 1988
Funding: $ 300,000
Award: Cooperative Agreement
Awardee: Western Consortium for the Health Professions, Inc.
703 Market Street, Suite 535
San Francisco, Calif. 94103
Project Officer: Aurora Zappolo
Division of Program Studies

Description: The purpose of this project is to develop an informational document that increases the capacity of aged Medicare beneficiaries to make prudent choices in selecting supplemental health insurance coverage. The document will permit comparisons of out-of-pocket costs and benefits of alternative plans. The comparisons will be based on "scenarios" involving episodes of illnesses common to the aged.

Status: Thirteen common illnesses have been identified, and these illness episodes represent conditions that are common for elderly persons and a wide range of service needs. Charges associated with the illness episodes for various options available in the study area, Los Angeles County, were prepared for use in workshops with Medicare beneficiaries. Two groups are being given pretest and post-test measurements of their choices regarding health insurance options. In the workshops for the test group, information on out-of-pocket expenses associated with each illness episode is being presented for each of the options available to them. In the workshops for the comparison groups, only general information on the insurance options is being presented. Options being presented include Medigap plans with a range of benefits, including skilled nursing facility care, closed and open panel health maintenance organizations, an exclusive provider organization option providing benefits beyond that generally offered by health insurance plans (e.g., hearing aids, glasses, prescription drugs), and a disease-specific plan.

Health Care Services for Children Under Medicaid

Project No.: 18-P-98011/3
Period: August 1981 - October 1987
Funding: $ 504,311
Award: Grant
Grantee: Johns Hopkins University
School of Medicine
Department of Pediatrics
720 Rutland Avenue
Baltimore, Md. 21205
Project Officer: Benson Dutton
Division of Reimbursement and Economic Studies

Description: This is a grant for a comparative study of health care services for children by using billing claims and eligibility data files from the State of Maryland. The grantee seeks information on the cost and effectiveness of services for children eligible for the Medicaid Early and Periodic Screening, Diagnosis, and Treatment Program. Data on the costs and utilization of services for children using private practitioners, hospital clinics, emergency rooms, and various combinations of delivery systems serve as the basis for this analysis.

Status: Using the data files for the Johns Hopkins Hospital Title V, Children and Youth Clinic, use of services by Medicaid and self-pay patients have been compared. Within an organized program, differences were small. The implications of these findings were explored, particularly in light of other studies. Services for children with asthma were studied in the Children and Youth Project and in the middle class population of the Columbia, Maryland Medical Plan. Services were far more numerous and thus, more costly for the children and youth Medicaid population than for Columbia. The monitoring of Medicaid services, including diagnosis-specific studies for other chronic and acute problems, with cost containment as the goal, will be tested against the large State Medicaid file. A final report is expected Winter 1987.

Medicaid Child Health Care Evaluation

Project No.: 500-84-0037
Period: September 1985 - February 1987
Funding: $ 60,000
Award: Contract
Contractor: SysteMetrics, Inc.
24 Hartwell Avenue
Lexington, Mass. 02173
Project Officer: Gerald S. Adler
Division of Beneficiary Studies

Description: The study takes an intensive look at the characteristics, use, and cost of care for selected subgroups of the child Medicaid population, by using person-based data from five State Medicaid Management Information Systems (Tape-to-Tape). Groups include poor children in intact families (Ribicoff children), disabled children, those in institutions for the mentally retarded, and newborns. These are presented in the context of overall Medicaid utilization by children.

Status: The study was awarded in September 1985, and a revised final report is expected in early 1987.

AFDC/Medicaid Eligibility: Impact on Prenatal Care Use

Project No.: IAA-85-0387
Period: September 1984 - March 1987
Funding: $ 74,553
Award: Interagency Agreement
Awardee: Human Services Development Institute
University of Southern Maine
246 Deering Avenue
Portland, Maine 04102
Project: Gerald S. Adler
Officer: Division of Beneficiary Studies

Description: This project is funded jointly, through an interagency agreement, by the Health Care Financing Administration and the Public Health Service, Division of Maternal and Child Health. The project examines the factors that determine whether or not prenatal care will be used, focusing on Medicaid/Aid to Families with Dependent Children eligibility policy as a key variable. Selected States, some with broad and some with stringent eligibility policies for pregnant women, will be compared. Other variables include characteristics of the mother, the family, and the medical care system that foster or impede adequate prenatal care. Data are obtained from birth records and surveys.

Status: The study includes participation by five States. The study for one State has been completed, the survey is under way in another State, and the sample of mothers is being drawn in the rest. A draft report is expected in December 1986.

Preventive Health Care for Medicaid Children: Relative Factors and Costs

Project No.	18-C-98897/5-01
Period:	October 1986 - September 1987
Funding:	$ 190,000
Award:	Cooperative Agreement
Awardee:	American Academy of Pediatrics 144 Northwest Point Boulevard P.O. Box 927 Elk Grove Village, Ill. 60007
Project Officer:	Martin Ruther Division of Program Studies

Description: This project will study preventive care received by children under the Medicaid program. In addition, data from the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program will be used. The study will use a sample of children continuously enrolled in Medicaid during 1980 in the State of Michigan. Differences in quantities and types of preventive services by client, organizational, and policy variables will also be identified. Lastly, for all children continuously enrolled in Medicaid from 1980 through 1983, the impact of different types of preventive services received in 1980 will be traced on utilization, costs of care, and some quality measures for 1981, 1982, and 1983. The source of Medicaid data will come from the Health Care Financing Administration's Tape-to-Tape project and possibly State EPSDT systems.

Status: This project was funded in October 1986.

Other Prevention

Municipal Health Services Program

Period:	August 1979 - December 1989
Award:	Cooperative Agreement
Participants:	Baltimore, Md. Cincinnati, Ohio Milwaukee, Wis. St. Louis, Mo. San Jose, Calif.
Project Officer:	Kathleen Farrell Division of Health Systems and Special Studies

Description: Development of the Municipal Health Services Program (MHSP) was a collaborative effort of five major cities in five States, the U.S. Conference of Mayors, the Robert Wood Johnson Foundation (RWJF), and the Health Care Financing Administration (HCFA). It was initiated by RWJF through grants of $3 million awarded in June 1978 to each of the following five cities: Baltimore, Cincinnati, Milwaukee, St. Louis, and San Jose. HCFA joined in the project by providing Medicare waivers through a cooperative agreement and Medicaid waivers through grants to four of the five States to test the effects of increased utilization of municipal health centers by:

- Eliminating coinsurance and deductibles.
- Expanding the range of covered services.
- Paying the cities the full cost of delivering services at the clinics.

The intent of the waivers is to shift fragmented utilization away from costly hospital emergency rooms and outpatient departments toward lower cost Municipal Health Services Program (MHSP) clinics which would provide beneficiaries with comprehensive primary and preventive health care.

Status: HCFA contracted with the University of Chicago's Center for Health Administration Studies (CHAS) to perform a detailed evaluation of cost and utilization. CHAS determined in its final evaluation report that MHSP improved access to health services by reaching certain targeted groups and provided an alternative source of care which appeared to be better on most convenience measures, such as travel time. The analysis indicated that MHSP clients in the Medicare program had significantly lower inpatient and total health care expenditures than a comparison group, after adjusting for predisposing, enabling, and need variables. No additional evaluation is planned for the period covered by this waiver extension. Waivers were scheduled to terminate on December 31, 1984; however, in response to proposals from four of the cities (St. Louis chose not to request an extension) to go at full risk and capitate Medicare Parts A and B services in 1986, HCFA agreed to extend the Medicare waivers 1 additional year, through December 1985. The projects were notified by HCFA in January 1985 that any capitated health care delivery systems developed during the extension period would be expected to meet the Tax Equity and Fiscal Responsibility Act health maintenance organization (HMO)/competitive medical plan requirements by December 31, 1985. This was to ensure that the MHSP delivery site could continue to provide services to

Medicare beneficiaries when waivers ended. Subsequently, the sites responded that they or HMO's with which they would contract as service delivery sites could not meet the enrollment-mix criterion (no more than 50 percent Medicare/Medicaid enrollment) within that time frame. The sites sought the passage of legislation enabling the demonstration to be extended for 3 more years. On December 19, 1985, Public Law 99-190 was signed, extending the demonstration 1 additional year through December 31, 1986. Consequently, Public Law 99-272 was signed, extending the demonstration 3 additional years through December 31, 1989.

Evaluation of Municipal Health Services Program

Project No.:	500-78-0097
Period:	September 1978 - March 1985
Funding:	$ 3,105,250
Award:	Contract
Contractor:	University of Chicago 5720 South Woodlawn Avenue Chicago, Ill. 60637
Project Officer:	Tony Hausner Office of Demonstrations and Evaluations

Description: This is an evaluation of the Municipal Health Services Program (MHSP) demonstrations. It is a collaborative effort with the Robert Wood Johnson Foundation. The evaluation covers the quality and efficiency of services delivered in urban clinics in five cities (Baltimore, Cincinnati, Milwaukee, St. Louis, and San Jose).

Status: The University of Chicago submitted the final report in April 1985. This evaluation indicates that MHSP did reach most, but not all, of the targeted groups. Although MHSP successfully replaced some outpatient departments and emergency room services, it failed to realize some of the program goals of continuity and high patient satisfaction. The evaluation found that the per capita costs of medical care for all MHSP users were not significantly different from the comparison group. However, the per capita costs for Medicare-eligible MHSP users were significantly lower than the comparison group. Pluribus Press published the final report entitled "The Municipal Health Services Program: Improving Access while Containing Costs" in Fall 1986.

Quality and Effectiveness of Preventive Medical Care

Project No.: 18-P-97777/9
Period: September 1980 - January 1987
Funding: $ 596,804
Award: Grant
Grantee: The Rand Corporation
1700 Main Street
Santa Monica, Calif. 90406
Project Officer: Benson Dutton
Division of Reimbursement and Economic Studies

Description: This study focuses on the effect of preventive care on various categories of medical expenditure and any losses attributed to sickness. Issues and questions to be addressed include:

- The effects of preventive care on health status, medical care use, and work time available.
- The responsiveness of consumer demand to changes in the price of preventive care.
- The amounts of preventive care used in prepaid systems versus fee-for-service practice settings, both with no out-of-pocket charges.
- Whether or not people choosing the prepayment plan are fundamentally different in their desires to obtain preventive care.

The study will use data from the Rand Health Insurance Study (HIS), a social experiment in which families are assigned to several different health insurance plans. Approximately 8,000 individuals have been enrolled at six sites across the country: Dayton, Ohio; Seattle, Wash.; Fitchburg, Mass.; Franklin County, Mass.; Charleston, S.C.; and Georgetown County, S.C.

Status: To date, this project has produced analyses of the frequency and cost of medical visits involving nonpreventive care and hospitalizations. Findings from this analysis indicate no significant effect of aggregate preventive activities on aggregate nonpreventive care, hospital visits, and costs. These findings were presented at the Conference on Productivity in Health, Stanford University, August 1983, and the Third International Conference on System Science in Health Care, Munich, Germany, July 1984. Rand has subsequently submitted a working draft entitled "Preventive Medical Care: Standards, Usage, and Efficacy," examining the effects of use of health services and health status, frequency of preventive use, cost sharing, use of preventive services, and a discussion of the limitations of the study. A final report is expected Winter 1987.

Prevention of Future Utilization of Health and Long-Term Care Services

Project No.: 18-P-98288/3-03
Period: March 1983 - March 1987
Funding: $ 747,000
Award: Grant
Grantee: Johns Hopkins University
School of Hygiene and Public Health
615 North Wolfe Street
Baltimore, Md. 21205
Project Officer: James Hadley
Division of Health Systems and Special Studies

Description: Johns Hopkins is evaluating an intervention project conducted at New York University Hospital, entitled "Cooperative Care" in which chronically ill Medicare beneficiaries and their care partners are trained in self-care techniques. The purpose of the project is to reduce the high rate of post-discharge rehospitalizations for certain chronic conditions (e.g., heart disease) through good home-care monitoring. Cooperative Care, a 4-day inpatient education program, emphasizes the care partner's role in reinforcing patients to take their medication and to adhere to diet and exercise regimens.

Status: Since the beginning of the study, 456 patients plus 456 care partners have been randomly assigned to either the experimental or control group. Approximately 80 percent of the experimental patients are transferred into Cooperative Care from New York University Hospital, and the other 20 percent are directly admitted to the program. All interview data and utilization data concerning patient experience in the cooperative care unit have been collected and analyzed. Control group data, which will be integrated into the final report expected in September 1987, is in the process of being analyzed.

Prevention of Falls in the Elderly

Project No.: 95-C-98578/9-02
Period: September 1984 - February 1988
Funding: $ 375,000
Award: Cooperative Agreement
Awardee: Kaiser Foundation Research Institute
Health Services Research Center
4610 Southeast Belmont Street
Portland, Oreg. 97215
Project Officer: Leslie N. Saber
Division of Long-Term Care Experimentation

Description: In September 1984, a cooperative agreement was awarded to the Kaiser Foundation Research Institute to test the effectiveness of a comprehensive program for the prevention of falls in the elderly. The project is being conducted through the Health Services Research Center, Kaiser Permanente Medical Care Program, in Portland, Oregon. The project design includes a randomized trial of 2,400 households with Kaiser members 65 years of age or over who are participating in two groups—an intervention group and a control group. All participants are providing data on falls and receive a home audit. Participants in the intervention group are offered a special falls prevention program which includes a self-management educational curriculum and the installation of safety equipment and minor renovations in the home. In addition, a blind control group of elderly Kaiser members are included to measure the incidence of falls-related medical care use. The project is collecting data for a 24-month period on all participants. Funding support for this demonstration is supplemented by the National Institute on Aging, the Robert Wood Johnson Foundation, and Kaiser Foundation Hospitals, Inc.

Status: An interagency agreement with the National Institute on Aging to fund this project was finalized in March 1985. The project completed its recruitment of participants by April 1986 and is currently tracking all participants for 1 year.

The Economy and Efficacy of Medicare Reimbursement for Preventive Services

Project No.: 95-C-98516/4-01
Period: September 1985 - September 1991
Funding: $ 1,800,000
Award: Cooperative Agreement
Awardee: University of North Carolina
Department of Social and Administrative Medicine
300 Bynam Hall, 008A
Chapel Hill, N.C. 27514
Project Officer: Marla Aron
Division of Health Systems and Special Studies

Description: The University of North Carolina at Chapel Hill will implement the preventive services demonstration in the Research Triangle area using a combination of primary care sites. To date, the following three organizations have agreed to participate: Lincoln Community Health Center in Durham (one site), Village Family Medicine in Chapel Hill (one site), and Wake Health Services in Raleigh (three sites). Participants will be identified from the registers of cooperating clinics and will be invited to participate. Those patients willing to participate will be randomly allocated to one of four groups: clinical screening only, health promotion only, clinical screening plus health promotion, and the usual care control. The total sample size will be approximately 4,000 (1,000 in each group). Clinical screening and health promotion services will be reimbursed separately (i.e., to average $100) at an annual rate of $57 for screening and $43 for health promotion services. The Health Care Financing Administration, Division of Research and Demonstrations Systems Support will process the claims. The evaluation will be conducted by the Department of Social and Administrative Medicine and the Health Services Research Center of the University of North Carolina at Chapel Hill.

Status: In October 1986, the project began offering clinical screening, health promotion, and followup services to appropriate participants.

A Demonstration and Evaluation of a Preventive Services Package to Provide Early Detection of Illness and Monitoring of High-Risk Medicare Beneficiaries

Project No.: 95-C-98539/1-02
Period: September 1985 - September 1991
Funding: $ 1,429,000
Award: Cooperative Agreement
Awardee: Blue Cross/Blue Shield of Massachusetts, Inc.
Health Program Development
100 Summer Street
Boston, Mass. 02106
Project Officer: John F. Meitl
Division of Health Systems and Special Studies

Description: Blue Cross/Blue Shield of Massachusetts, Inc. has designed and will implement a population-based randomized study that will test the impact of a four-part annual prevention benefit package on the health status and health service cost and utilization of Medicare beneficiaries. The benefit package will include:

- An annual risk appraisal with clinical screening and comprehensive assessment.
- Drug evaluation.
- Health education and health promotion activities.
- Referrals to community resources.

The clinical screening process will include a detailed health history, height, weight, blood pressure check, and a vision test. Letters of invitation to participate in the demonstration will be sent to all Medicare beneficiaries residing in ZIP code areas that have been assigned to each of the following three participating clinics in the Boston area: Urban Medical Group, Beth Israel Health Care Associates, and North Education Community Health Center. Participants can only receive the prevention benefit package from the clinic to which they have been assigned. Approximately 10,000 Medicare beneficiaries will be randomly assigned into the experimental or control groups (5,000 each). About 60 percent are expected to agree to participate and receive the prevention package (3,000). The prevention services will be given by a geriatric nurse practitioner with pharmacist involvement. Of the 3,000, it is expected that 2,400 beneficiaries will be assessed annually, and the estimated 600 who are expected to be at high risk during the annual risk appraisal will be followed and assessed quarterly. Reimbursement for the preventive services will average $100 per beneficiary per year, and Blue Cross and Blue Shield will process the claims from the providers.

Status: During the developmental phase of the demonstration, Blue Cross and Blue Shield has submitted a waiver cost estimate, a protocol, and a continuation application for the second year of the demonstration. Implementation of the operational phase of the demonstration is planned for March 1987.

INDEX TO CONGRESSIONALLY MANDATED STUDIES

NOTES

Availability of Project Reports and Results

As extramural projects are completed, the final reports are placed with the National Technical Information Service (NTIS) for public access. For those projects with final reports at NTIS, the accession number for ordering purposes is given in the project write-up. Reports are available in hard copy or microfiche form; costs vary depending on the size of the reports. Further information may be obtained from: National Technical Information Service, Document Sales, 5285 Port Royal Road, Springfield, Virginia 22161, (703) 487-4650.

A few final reports are published by the Health Care Financing Administration. These reports are available for sale from the U.S. Government Printing Office (GPO). Reports must be ordered by title and stock number directly from GPO. For those projects with published final reports, ordering information is given in the project write-up. Send check or money order for the price listed and make payable to: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

In addition, results from intramural and extramural research projects and demonstrations are often featured in the *Health Care Financing Review*, the Agency's quarterly journal. The journal also offers synopses on newly awarded research and demonstration projects being funded by the Health Care Financing Administration. The *Review* is available on a subscription basis from the Superintendent of Documents for $18.00 ($22.50 foreign). Subscribers receive four quarterly issues and one annual single-theme supplement per year.

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Office of Research and Demonstrations
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